



REPORT

2021 Semi-Annual Groundwater Monitoring & Corrective Action Report

Georgia Power Company - Plant McDonough-Atkinson Ash Pond 1

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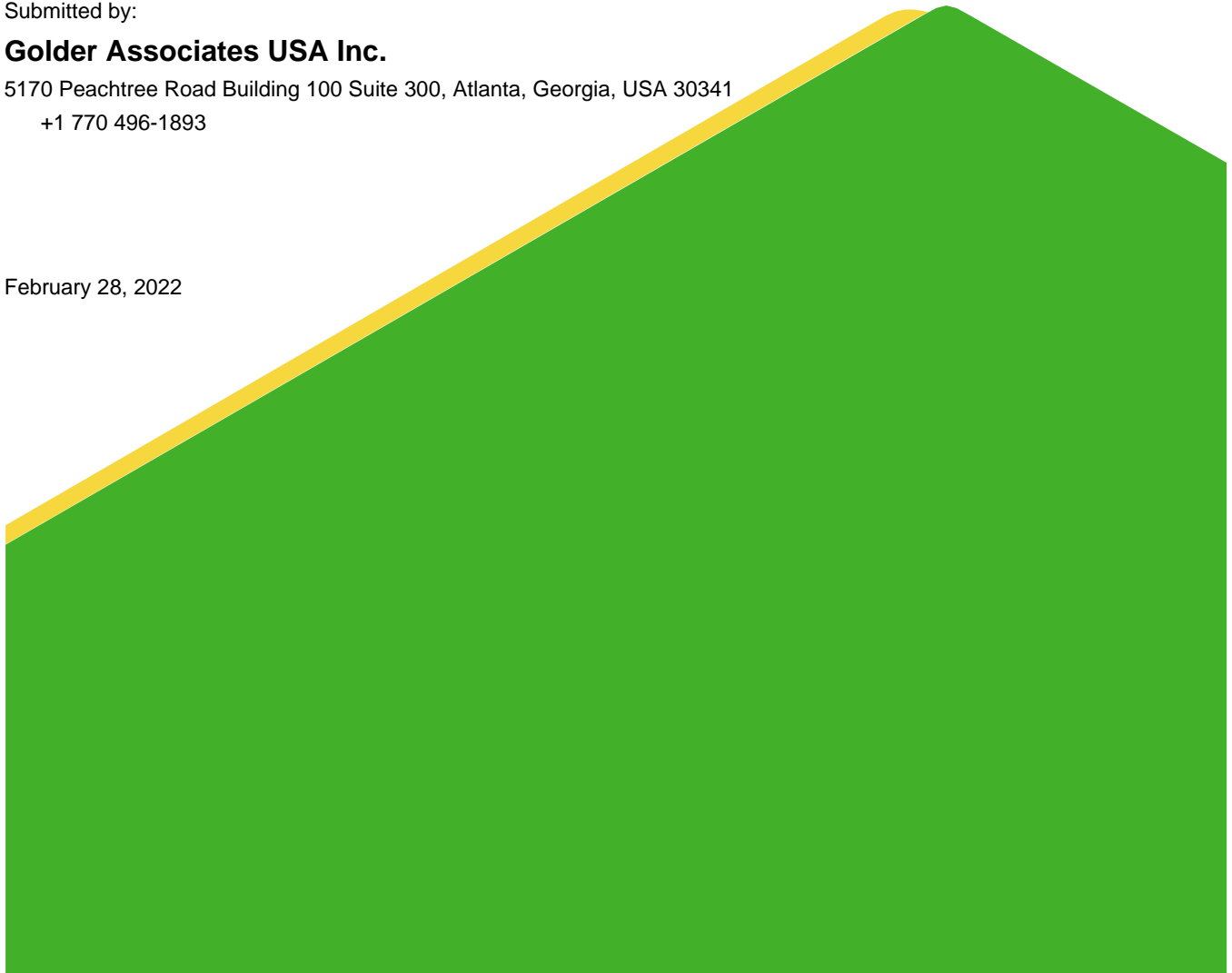
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Summary

This summary of the 2021 Semi-Annual Groundwater Monitoring & Corrective Action Report provides the status of groundwater monitoring and corrective program from July 2021 through December 2021 at Georgia Power Company (Georgia Power)'s Plant McDonough-Atkinson Ash Pond 1 (AP-1). This summary was prepared by Golder Associates USA Inc. (Golder) on behalf of Georgia Power to meet the requirements listed in Part A, Section 6¹ of the US Environmental Protection Agency (US EPA) coal combustion residual (CCR) rule [40 Code of Federal Regulations (CFR) 257 Subpart D]. As required in 40 CFR § 257.90(e), this semi-annual report describes the status of the groundwater monitoring program, summarizes key actions completed, and presents projected key activities for the upcoming year for AP-1. Other CCR units (AP-2 and 3/4) on-site at Plant McDonough are reported separately.

Plant McDonough-Atkinson (Plant McDonough), formerly a coal-fired power generating facility, was converted to a natural gas combined-cycle power generating facility in 2011. Located approximately 7 miles northwest of Atlanta in southeast Cobb County (5551 South Cobb Dr SE, Atlanta, Georgia 30339), the property occupies approximately 390 acres and is bounded on the southeast by the Chattahoochee River.

Groundwater at AP-1 is monitored using a comprehensive well network comprised of upgradient and downgradient wells that meet federal and state monitoring requirements. Routine sampling and reporting for AP-1 began after the background groundwater conditions were established between 2016 and 2018. Based on groundwater quality, an assessment monitoring program and assessment of corrective measures were established on November 13, 2019, and July 9, 2020, respectively. During the 2021 second semi-annual reporting period, the Site remained in assessment monitoring as corrective measures are evaluated.



Plant McDonough

Groundwater elevation measurements were recorded from the site monitoring wells prior to each sampling event. The elevation data were used to confirm the groundwater flow direction, and to confirm that the groundwater monitoring well network for the CCR units remains sufficient to monitor groundwater downgradient of the unit.

¹ 80 FR 21468, April 17, 2015, as amended at 81 FR 51807, August 5, 2016; 83 FR 36452, July 30, 2018; 85 FR 53561, August 28, 2020.

There was no change to the AP-1 certified detection monitoring network in 2021. The second semi-annual groundwater monitoring sampling event for AP-1 was conducted in September and October 2021. Groundwater samples were collected and analyzed for Appendix III² and Appendix IV³ required monitoring parameters.

Analytical data from the September and October 2021 monitoring events have been statistically analyzed in accordance with the Site's certified statistical analysis method (Groundwater Stats Consulting, 2019). For the September and October 2021 semi-annual monitoring event, statistical analyses indicate statistically significant increases (SSIs) for Appendix III constituents above the statistical limits and statistically significant levels (SSLs) of Appendix IV constituents above the groundwater protection standards as summarized below.

Appendix III Constituent	September 2021
Boron	DGWC-37, DGWC-38, DGWC-39, DGWC-40, DGWC-67, DGWC-68A, DGWC-69
Calcium	DGWC-37, DGWC-38, DGWC-39, DGWC-40, DGWC-67, DGWC-68A
Chloride	DGWC-37, DGWC-38, DGWC-39, DGWC-40, DGWC-67
Fluoride	DGWC-68A
pH	DGWC-40, DGWC-68A
Sulfate	DGWC-37, DGWC-38, DGWC-39, DGWC-40, DGWC-67
TDS	DGWC-37, DGWC-38, DGWC-39, DGWC-40, DGWC-67
Appendix IV Constituent	September 2021
Arsenic	DGWC-69
Cobalt	DGWC-40
Molybdenum	DGWC-68A

The Appendix IV SSLs are horizontally delineated onsite through surface water sampling downgradient of the site. Surface water samples were collected in September 2021. Arsenic, cobalt, and molybdenum were not detected in the surface water bodies downgradient of AP-1. Arsenic and cobalt are vertically delineated in onsite deeper wells. Vertical delineation of molybdenum is in progress. Based on review of the Appendix III and Appendix IV results noted above, the site will remain in assessment monitoring. Georgia Power will continue routine groundwater monitoring and evaluation of corrective action alternatives at the site. Reports will be posted to the website and provided to the Georgia Environmental Protection Division (GA EPD) semi-annually.

² Appendix III: boron, calcium, chloride, fluoride, pH, sulfate, and total dissolved solids

³ Appendix IV: antimony, arsenic, barium, beryllium, cadmium, chromium, cobalt, fluoride, lead, lithium, mercury, molybdenum, combined radium (226 + 228), selenium, and thallium.

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CERTIFICATION

This 2021 Semi -Annual Groundwater Monitoring & Corrective Action Report, Georgia Power Company - Plant McDonough-Atkinson – Ash Pond 1 (AP-1) has been prepared in compliance with the United States Environmental Protection Agency coal combustion residual rule [40 Code of Federal Regulations (CFR) 257 Subpart D] and the Georgia Environmental Protection Division Rules for Solid Waste Management 391-3-4-.10 (6)(a-c) by a qualified groundwater scientist or engineer with Golder Associates Inc.

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1.0 INTRODUCTION

In accordance with the United States Environmental Protection Agency (US EPA) coal combustion residuals (CCR) rule [40 Code of Federal Regulations (CFR) 257 Subpart D] and the Georgia (GA) Environmental Protection Division (EPD) Rules for Solid Waste Management 391-3-4-.10, this *2021 Semi-Annual Groundwater Monitoring and Corrective Action Report* was prepared to document groundwater monitoring activities conducted at Georgia Power Company (Georgia Power)'s Plant McDonough-Atkinson Ash Pond 1 (AP-1) and satisfies the requirements of § 257.90(e). To specify groundwater monitoring requirements, GA EPD rule 391-3-4-.10(6)(a) incorporates by reference the US EPA CCR rule (40 CFR 257 Subpart D). For ease of reference, the US EPA CCR rules are cited within this report.

This semi-annual report documents groundwater monitoring activities, including a semi-annual monitoring event, conducted during the second half of 2021 at AP-1. Activities completed at Plant McDonough's Ash Ponds 2, 3, and 4 are reported under a separate cover.

1.1 Site Description and Background

Plant McDonough-Atkinson (Plant McDonough, Site), formerly a coal-fired power generating facility, was converted to a natural gas combined-cycle power generating facility in 2011. Located approximately 7 miles northwest of Atlanta in southeast Cobb County (5551 South Cobb Dr SE, Atlanta, GA 30339), the property occupies approximately 390 acres and is bounded on the southeast by the Chattahoochee River. A Site location map is included as Figure 1.

Four CCR surface impoundments are located on-site: Ash Pond 1 (AP-1), Ash Pond 2 (AP-2), Ash Pond 3 (AP-3) and Ash Pond 4 (AP-4). AP-3 and AP-4 have historically operated together and are being closed as a Combined Unit AP-2 and 3/4 and is reported separately. A notification of intent to initiate closure of the inactive CCR surface impoundment for AP-1 was certified on December 7, 2015 and posted to Georgia Power's website. A permit application package was submitted to GA EPD in November 2018 and is pending approval. Groundwater monitoring and reporting for AP-1 are being performed to meet the alternate schedule in § 257.100(e)(5) of the revised US EPA CCR rule (August 5, 2016).

1.2 Regional Geology and Hydrogeologic Setting

The following section and subsections include a general description of regional geologic and hydrogeologic characteristics of formations that occur beneath the Site (Golder, 2022). The Site is located in the Piedmont/Blue Ridge geologic province, which contains some of the oldest rock formations in the southeastern United States. These late Precambrian to late Paleozoic rocks have undergone repeated cycles of igneous intrusions and extrusions, metamorphism, folding, faulting, shearing, and silicification. Rock outcrops near the Site consist of biotite gneiss, porphyritic gneiss, mica schist, and quartzite.

Residual soils, primarily clayey/sandy silt, sandy silt with clay, and silty sand, occur as a variably thick blanket overlying bedrock across most of the Site. These residual saprolitic soils along with saprolitic transitionally or partially weathered rock, collectively the overburden, range between approximately 9 to 61 feet in thickness across the Site, with an average thickness of approximately 38 feet. Saprolitic rock is considered to be transitionally weathered rock (TWR) or partially weathered rock (PWR). Where TWR is a qualitative description, PWR is defined by Standard Penetration Test (SPT) blow counts that exceed 50 blows/six inches.

A regional, unconfined surficial aquifer system is present at the Site, existing within the overburden and weathered and fractured upper bedrock (e.g., approximate first 30 feet), depending on topographic location. Recharge primarily occurs through precipitation and subsequent infiltration. Generally, groundwater flow occurs through intergranular pore spaces in the overburden and is controlled by topography and top of rock variations. However, a relatively higher transmissive zone is interpreted to occur at the base of the overburden, at the interface of weathered bedrock and competent bedrock and is believed to be the primary groundwater flow path. Groundwater in the overburden has an average horizontal hydraulic conductivity of 10^{-4} centimeters per second (cm/s) and is interpreted to flow south-southeast.

A limited and localized bedrock aquifer system also occurs beneath the Site. The upper bedrock is fractured and weathered, connected hydraulically with the overburden groundwater, and is considered part of the upper aquifer. The overlying silt/clay-rich overburden may act to retard recharge into the bedrock aquifer system. However, deeper bedrock (i.e., approximately 30 feet into the bedrock) is unweathered with few discontinuities (e.g., fractures) available to store groundwater.

1.3 Groundwater Monitoring Network

Pursuant to § 257.91, a groundwater monitoring system was installed within the uppermost aquifer at AP-1 to monitor groundwater passing the waste boundary. Wells were located to monitor upgradient and downgradient groundwater conditions based on groundwater flow direction. The monitoring well network was certified by a Professional Engineer in Georgia on April 17, 2019, and the certification is maintained in the Operating Record pursuant to § 257.90(f). AP-1 monitoring well and piezometer locations are shown on Figure 2.

A comprehensive network of monitoring wells were installed for groundwater monitoring in proximity to AP-1. Table 1 includes well construction details for the AP-1 monitoring well network. Additionally, a separate network for AP-2 and 3/4 as well as a series of piezometers were installed at the Site. Table 1 also includes the current assessment well network and the construction details for each of the Site wells and piezometers for AP-1 and the separate multi-unit monitoring network for AP-2 and 3/4.

2.0 GROUNDWATER MONITORING ACTIVITIES

The following section describes monitoring-related activities for sampling performed at the Site from July 2021 through December 2021. Routine groundwater sampling was performed in September 2021 in accordance with 40 CFR § 257.93. Due to flooding during the semi-annual monitoring, some of the monitoring wells were not accessible and a water level monitoring event and resampling event was conducted on October 27, 2021. Field sampling forms for this monitoring event are contained in Appendix A, while laboratory analytical results are contained in Appendix B.

2.1 Monitoring Well Installation and Maintenance

There was no change to the detection groundwater monitoring system during this reporting period. Monitoring well related activities included visual inspection of well conditions prior to sampling, recording conditions around the well, and performing exterior maintenance to provide safe access for sampling. The well inspection logs are included in Appendix C.

Monitoring wells are inspected semiannually to determine if any repairs or corrective actions are necessary to meet the requirements of the Georgia Water Well Standards Act (O.C.G.A. § 12-5-134(5)(d)(vii)). In October 2021, monitoring wells were inspected, necessary corrective actions were identified and subsequently completed,

as documented in Appendix C. This documentation will serve as the required five year well inspection and was performed under the direction of a professional geologist or engineer registered in the State of Georgia.

2.2 Assessment Monitoring

Pursuant to §257.94(e), an assessment monitoring program has been established for AP-1 at Plant McDonough based on the statistically significant increases (SSIs) documented in the *2019 Annual Groundwater Monitoring and Corrective Action Report*, (Golder, 2019). A notice of assessment monitoring was placed in the operating record on November 13, 2019.

Groundwater sampling event was conducted for AP-1 in September 2021 with a subsequent resampling event for a single well (DGWC-68A) in October 2021 in accordance with § 257.93 and GA EPD rule 391-3-4-.10(6)(a). Samples were collected from each well in the certified monitoring network. The monitoring wells sampled included AP-1 monitoring wells presented in Table 1. The location of each of these monitoring wells is shown on Figure 2. Table 2 presents a summary of groundwater sampling events completed for AP-1 and the status of the monitoring network.

During the September 2021 semi-annual sampling event, groundwater samples were collected and analyzed for Appendix III and Appendix IV constituents. Results of sampling activities conducted in September and October 2021 are presented in Appendix B.

2.3 Additional Sampling

Additional sampling was conducted during the reporting period in support of the assessment of corrective measures and in continuing to define the nature and extent of impacts resulting from AP-1. Additional sampling included sampling at upgradient monitoring wells B-116D, B-117D, B-118 and B-119D to characterize background conditions at the Site and are being evaluated to update the statistical network.

Due to the proximity of the engineered stream channel [also referred to as the unnamed tributary (UT)] west of AP-1 and the Chattahoochee River in the downgradient direction of the wells with statistically significant levels (SSLs) of arsenic, cobalt and molybdenum, installation of additional wells to horizontally characterize this area is infeasible. In response, Georgia Power collected surface water samples from four (4) locations within the engineered stream channel and seven (7) locations within the Chattahoochee River on September 7, 2021. The surface water samples collected in September 2021 were analyzed for Appendix III parameters, select Appendix IV parameters (i.e., arsenic, cobalt, and molybdenum) and major ions (magnesium, potassium, sodium, and total and bicarbonate alkalinity). Surface water sample locations are shown on Figure 2. Surface water samples are collected in accordance with *Region 4 U.S. Environmental Protection Agency Science and Ecosystem Support Division Operating Procedures for Surface Water Sampling* SESDPROC-201-R4 (December 16, 2016). The laboratory reports associated with the September 2021 sampling events are provided in Appendix B. Georgia Power will continue collecting the surface water samples semi-annually.

3.0 SAMPLE METHODOLOGY AND ANALYSIS

Sampling events completed during this reporting period at AP-1 include the September semi-annual assessment monitoring event. A verification resampling event was conducted for DGWC68A on October 27, 2021 to confirm results that were outside historical range. Groundwater analytical data and chain of custody records are presented in Appendix B. The following sections describe methods used to conduct groundwater monitoring at the Site.

3.1 Groundwater Elevation Measurement

Sitewide Groundwater elevations could not be measured at the start of the September 2021 sampling event due to significant rainfall that limited access to some well locations. Therefore, sitewide groundwater elevations were recorded in October 2021, after the completion of the semi-annual sampling event. The potentiometric maps are based on the October 2021 elevation data due to well access limitations at the time of scheduled sampling. Groundwater elevations data are summarized in Table 3. Calculated water level data were used to develop Figure 3. Site potentiometric maps show that groundwater generally flows west/southwest across the Site and is consistent with historical observations.

3.2 Groundwater Gradient and Flow Velocity

Hydraulic gradient is calculated as the difference in groundwater elevation (in feet) divided by the distance between two piezometers or wells (in feet). Groundwater elevation data recorded in October 2021 from three piezometer/well pairings; B-29/DGWC-68A, B-28/DWGC-37, and B-50/DWGC-39, located along the groundwater flow path and perpendicular to the potentiometric contours were used to calculate hydraulic gradients for AP-1.

Average groundwater flow velocities at the Site were calculated using hydraulic gradient data, hydraulic conductivity data generated from slug testing results (Golder, 2022), and an estimated effective porosity of the screened portion of the uppermost aquifer. Based on slug test data, the average hydraulic conductivity of the overburden is 7.70×10^{-4} centimeters/second (cm/s). An effective porosity of 0.2 (20%) was used based on the default values for effective porosity recommended by US EPA for a silty sand-type soil (US EPA, 1996). The hydraulic gradients calculated between the well pairs are shown on Table 4 for October 2021.

The horizontal flow velocities were calculated using the commonly used derivative of Darcy's Law:

$$V = \frac{K * i}{n_e} \quad \text{Where:}$$

$V =$ Groundwater flow velocity $\left(\frac{\text{feet}}{\text{day}} \right)$
 $K =$ Average hydraulic conductivity of the aquifer $\left(\frac{\text{feet}}{\text{day}} \right)$
 $i =$ Horizontal hydraulic gradient $\left[\frac{\text{feet}}{\text{feet}} \right]$
 $n_e =$ Effective porosity

Using this equation, groundwater flow velocities were calculated for AP-1 using October 2021 groundwater elevation data as presented on Table 4.

Calculated (horizontal) flow velocities ranged from approximately 78 feet per year (ft/yr) to 143 ft/yr in October 2021. These estimated flow velocities are consistent with past results and are also generally consistent with other published velocities for regolith-upper bedrock aquifers of the Piedmont (Heath, R.C., 1982).

3.3 Groundwater Sampling

Groundwater samples were collected in accordance with § 257.93(a) and using US EPA Region 4 Field Quality and Technical Procedures as a guide (US EPA, 2001). Monitoring wells were purged and sampled using low-flow sampling procedures. Non-dedicated, low-flow pneumatic bladder pumps and peristaltic pumps were used to purge and sample the wells. Field equipment was decontaminated prior to use and between wells using US EPA

Laboratory Services and Applied Science Division, Operating Procedure, Field Equipment Cleaning and Decontamination (US EPA, 2020). In-Situ SmarTroll and Aqua TROLL 400 were used to monitor and record field water quality parameters [temperature, specific conductance, dissolved oxygen (DO), pH, and oxidation-reduction potential (ORP)] during purging. Turbidity was monitored using a LaMotte 2020we turbidimeter. Groundwater samples were collected when the following stabilization criteria were met for a minimum of three consecutive readings:

- 0.1 standard units for pH
- 5% for specific conductance
- $\pm 10\%$ or ± 0.2 mg/L (whichever is greater) for DO where $DO > 0.5$ mg/L; if $DO < 0.5$ milligrams per liter (mg/L), no stabilization criteria apply
- Turbidity measurements less than 5 nephelometric turbidity units (NTU).

Following well stabilization, unfiltered samples were collected directly into appropriately preserved laboratory supplied sample containers, placed in ice-packed coolers, and submitted to the laboratory following standard chain-of-custody protocol. Field information forms, generated directly from the SmarTroll®/Aqua TROLL®, are included in Appendix A.

Field data and sampling notes for each monitoring well are recorded on the field information forms, which contains a description of the sampling equipment, sampling method, purge rate, field observations, and depth to water measurements at each monitoring location. Calibration forms for field instruments and field data sheets are also included in Appendix A.

3.4 Laboratory Analysis

The groundwater samples were analyzed for Appendix III and Appendix IV monitoring parameters per 40 CFR § 257.93 and § 257.95(d)(2). Table 5 presents a tabulated summary of the September 2021 detection, assessment and supplemental sample results. Results of surface water samples collected in September 2021 are presented on Table 6. Analytical methods used for monitoring parameters can be found in the analytical data reports in Appendix B.

Laboratory analyses for all events were performed by Pace Analytical Services, LLC (Pace) in Peachtree Corners, Georgia. Pace is accredited by the National Environmental Laboratory Accreditation Program (NELAP) and maintains NELAP certification for all parameters analyzed for this project. Analytical data, chain-of-custody records, and NELAP certifications for the monitoring events are presented in Appendix B.

3.5 Quality Assurance and Quality Control

During each sampling event, quality assurance/quality control (QA/QC) samples were collected at a minimum rate of one sample per every 10 samples. QA/QC samples included equipment blanks (where non-dedicated sampling equipment is used), field blanks, and duplicate samples. QA/QC sample data were evaluated during data validation (as described below) and is included in Appendix B.

Groundwater quality data in this report were independently validated in accordance with US EPA Region IV Data Validation Standard Operating Procedures (US EPA, 2011), National Functional Guidelines for Inorganic Superfund Methods Data Review (January 2017) and the analytical methods. Data validation generally consisted

of reviewing sample integrity, holding times, laboratory method blanks, laboratory control samples, matrix spikes/matrix spike duplicate recoveries, relative percent differences (RPDs), laboratory and field duplicate RPDs, field and equipment blanks, and reporting limits. Where appropriate, validation qualifiers and flags are applied to the data per US EPA procedures and guidance. Data validation summaries are provided in Appendix B. The data are considered usable for meeting project objectives and the results are considered valid.

A value followed by a "J" flag in tables and laboratory reports indicate that the value is an estimated analyte concentration detected between the method detection limit (MDL) and the laboratory reporting limit (RL). The estimated value is positively identified but is below the lowest level that can be reliably achieved within specified limits of precision and accuracy under routine laboratory operating conditions. Total radium concentration (Radium 226+228) is a combination of isotopes 226 and 228. When radium data are reported below the MDC (Minimum Detectable Concentration), the values are followed by a "U" flag in tables.

4.0 STATISTICAL ANALYSIS

Statistical analysis of Appendix III and Appendix IV groundwater monitoring data was performed pursuant to §257.93-95 following the established statistical method for AP-1. The statistical analysis report prepared by Groundwater Stats Consulting, LLC. is presented in Appendix D.

4.1 Statistical Method

The selected statistical method for AP-1 was developed in accordance with 40 CFR § 257.93(f), using methodology presented in Statistical Analysis of Groundwater Data at Resource Conservation and Recovery Act (RCRA) Facilities, Unified Guidance, March 2009, US EPA 530/R-09-007 (Unified Guidance; US EPA, 2009). The Sanitas groundwater statistical software was used to perform statistical analyses. Sanitas is a decision-support software package that incorporates the statistical tests required of Subtitle C and D facilities by US EPA regulations and guidance as recommended in the US EPA Unified Guidance (2009) document.

4.1.1 Appendix III Detection Monitoring Statistical Methods

Groundwater monitoring data were statistically evaluated through the use of interwell prediction limits for Appendix III parameters. Using this method, upgradient well data were pooled to establish a background statistical limit. Data from the September 2021 assessment monitoring event were compared to the statistical limit to determine whether any concentrations exceed background levels. The selected statistical method uses an optional 1-of-2 verification resample plan. The Sen's Slope/Mann Kendall trend test was also performed to evaluate concentrations over time and determine whether concentrations are statistically increasing, decreasing, or stabilizing.

4.1.2 Appendix IV Assessment Monitoring Statistical Methods

Statistical analysis, while in assessment monitoring, is performed through the use of confidence intervals compared to a groundwater protection standard (GWPS). Parametric tolerance limits are used to calculate Site specific background limits from pooled upgradient well data for Appendix IV parameters with a target of 95% confidence and 95% coverage. The confidence and coverage levels for nonparametric tolerance limits are dependent upon the number of background samples. The background limits were then used when determining the GWPS under 40 CFR § 257.95(h) and GA EPD Rule 391-3-4-.10(6)(a). As described in 40 CFR § 257.95(h)(1-3), the GWPS is:

- The maximum contaminant level (MCL) established under §§ 141.62 and 141.66 of this title.

- Where an MCL has not been established, Rule Specified Limits (RSLs) have been specified for cobalt (0.006 mg/L), lead (0.015 mg/L), lithium (0.040 mg/L), or molybdenum (0.100 mg/L). These criteria are not currently adopted by Georgia EPD.
- The respective background level for a constituent when the background level is higher than the MCL or rule identified GWPS.

US EPA revised the CCR Rule on July 30, 2018, updating GWPS for cobalt, lead, lithium, and molybdenum as described above in 40 CFR § 257.95(h)(2). Presently those updated GWPS have not yet been incorporated in the current GA EPD Rules for Solid Waste Management 391-3-4-.10(6)(a); therefore, under EPD rules, background concentrations are considered when determining the GWPS for constituents where an MCL has not been established (or where background is higher than the MCL). Under the existing EPD rules, the GWPS is:

- The MCL or
- The background concentration when an MCL is not established or when the background concentration is higher than the MCL.

Following the above federal and state rule requirements, GWPSs were established for statistical comparison of Appendix IV constituents. Table 7 summarizes the background limit established at each monitoring well and the GWPS established under State and Federal rules.

To complete the statistical comparison to GWPS, confidence intervals were constructed for each of the Appendix IV parameters in each downgradient well. Those confidence intervals were compared to the GWPS established for both the State and Federal rules. Only when the entire confidence interval is above a GWPS is the well/constituent pair considered to exceed its respective standard. If there is an exceedance of the established standard, an SSL exceedance is identified.

A summary table of the statistical results accompanies the prediction limits for Appendix III and confidence intervals for Appendix IV in Appendix D. The background period for statistical analyses includes data through the current event. Tolerance limits for confidence interval calculations are updated to include current data. Due to varying reporting limits in background, the most recent reporting limit is used when data are not reported above detection limits. This results in a more appropriate statistical test.

4.2 Statistical Analysis Results

Analytical data from September 2021 and resample results from DGWC-68A collected on October 27, 2021 at AP-1 have been statistically analyzed in accordance with the Site's certified Statistical Analysis Plan. The statistical results are included in Appendix D.

4.2.1 September 2021 Appendix III Statistical Results

Based on the statistical results, SSIs of boron, calcium, chloride, pH, sulfate, and total dissolved solids (TDS) were identified following the September-October 2021 assessment monitoring event. A detailed list of the noted exceedances is presented in Appendix D.

4.2.2 September 2021 Appendix IV Statistical Results

Analytical data from the September-October 2021 monitoring event at AP-1 have been statistically analyzed in accordance with the certified statistical analysis method. Review of the Sanitas results indicates that using the

GWPS established according to both 40 CFR § 257.95(h) and 391-3-4-.10(6)(a), the following SSLs were identified:

AP-1 Confidence Interval Statistically Significant Level Exceedances	
Appendix IV Parameter	AP-1 Detection Monitoring Well
Arsenic	DGWC-69
Cobalt	DGWC-40
Molybdenum	DGWC-68A

5.0 ASSESSMENT MONITORING AND DELINEATION STATUS

To characterize the nature and extent of arsenic, cobalt, and molybdenum SSLs, multiple piezometers have been installed and sampled at the Site (e.g., Golder, 2021a); refer to the table below for constituent delineation status. In addition, surface water has been sampled at multiple locations to demonstrate horizontal delineation in surface water bodies where proximity to surface water prevented installation of additional wells. Details regarding the delineation status at AP-1 is discussed in the *Semi-Annual Remedy Selection and Design Progress Report* (Appendix E) and includes isoconcentration contours for each of the constituents with an exceedance of the GWPS.

Constituent of Concern	Detection Monitoring Well with SSL	Vertical Delineation Well	Horizontal Delineation Well / Surface Water Monitoring Location
Arsenic	DGWC-69	B-112D ^[1]	UT02
Molybdenum	DGWC-68A	Ongoing	UT03
Cobalt	DGWC-40	B-105D ^[1]	B-62

Note:

[1] Delineation status is complete pending additional data collection. A minimum of four data points is needed to perform the required statistical analyses. To date, each of the samples collected at the indicated locations are below the GWPS.

Limited groundwater analytical data are available for assessment monitoring wells. In accordance with Section 21.1.1 of the Unified Guidance (US EPA, 2009), four independent data are the minimum population size recommended to construct confidence intervals required to assess SSLs for Appendix IV constituents. At the time of this report, the data set for many of the assessment wells is limited to fewer than four independent datums and therefore not appropriate for the statistical analyses at this time. For wells where the minimum of four data points are available, statistical analyses are included in Appendix D.

Assessment monitoring data from the September 2021 monitoring event at AP-1 were statistically analyzed in accordance with the certified statistical analysis method where sufficient data are available (B-62 and B-100 only). Review of the Sanitas results indicates that using the GWPS established according to both 40 CFR § 257.95(h) and 391-3-4-.10(6)(a), there are no exceedances of the GWPS where sufficient data are available.

As a conservative approach, Georgia Power elected to collect surface water samples to supplement horizontal delineation. Due to the proximity of the engineered stream channel (also identified as the unnamed tributary) and the Chattahoochee River in the downgradient direction of the wells showing SSLs of arsenic (DGWC-69), molybdenum (DGWC-68A), and cobalt (DGWC-40), installation of additional wells to horizontally characterize this area is infeasible. As such, surface water samples were collected from both the engineered stream channel and the Chattahoochee River in September 2021.

Based on review of the analytical results, statistical analyses and the isoconcentration contours, horizontal and vertical delineation is summarized as follows:

Arsenic at DGWC-69: Horizontal delineation is complete based on results from sampling of the unnamed tributary at UT02. The arsenic SSL noted at DGWC-69 is preliminarily vertically delineated to below GWPS at well B-112D, located adjacent to DGWC-69. Delineation is pending verification statistical analyses following additional data collection. Concentrations for each of the two samples collected from B-112D collected to date are below the GWPS.

Molybdenum at DGWC-68A: Horizontal delineation of molybdenum is complete with sampling of the unnamed tributary at UT03.

Vertical delineation for molybdenum DGWC-68A is in progress. Delineation efforts with deeper wells B-110D and B-113D, which are adjacent to DGWC-68A, suggest a natural occurrence of molybdenum in the underlying metamorphic rocks. Results from rock analyses completed at B-113D indicate naturally occurring molybdenum is present in the rock in the form of molybdenite. Occurrence of molybdenite crystals in the biotite gneiss including the more felsic portions indicates that molybdenum in groundwater in wells DGWC-68A, B-110D, and B 113D is likely derived from the molybdenum-rich rocks. As such, vertical delineation for molybdenum at DGWC-68A is ongoing pending further evaluation of this natural source. If necessary, additional vertical delineation will be performed.

Cobalt at DGWC-40: Horizontal delineation for cobalt below the GWPS is complete based on results from monitoring well B-62 where cobalt concentrations are below the GWPS. Similarly, cobalt is vertically delineated to below the GWPS at well B-105D, which is located adjacent to DGWC-40, pending statistical analyses following additional data collection. Concentrations for each of the three samples collected from B-105D collected to date are below the GWPS.

6.0 ASSESSMENT OF CORRECTIVE MEASURES

Following the requirements of 40 CFR § 257.96, Plant McDonough has initiated an Assessment of Corrective Measures (ACM) for cobalt and molybdenum. Notification of this action was placed in the operating record on July 9, 2020. Since the submission of the ACM report in December 2020, arsenic was identified as an SSL at well DGWC-69 (Golder, 2020b) and this SSL was incorporated into the ACM evaluation.

In accordance with 40 CFR § 257.97(a), a remedy selection progress report will be prepared and submitted concurrent with semi-annual groundwater monitoring reports to document results associated with additional data collection, and present progress toward selection and design of a groundwater remedy. A copy of the report is included as Appendix E. At least 30 days prior to the selection of remedy or remedies, a public meeting to discuss the results of the corrective measures assessment will be held pursuant to 40 CFR 257.96(e).

The *Semi-Annual Remedy Selection and Design Progress Report* that is included as Appendix E includes the following information:

- i) A summary of the closure status for AP-1 as it relates to source control.
- ii) Summary of work completed to achieve delineation of constituents exceeding groundwater protection standards and a summary of data collected to date towards remedy selection.
- iii) A summary of remedial alternatives and progress towards remedy selection.

7.0 MONITORING PROGRAM STATUS

Statistical evaluations of the groundwater monitoring data for AP-1 confirms SSIs of Appendix III groundwater monitoring parameters above background and SSLs of Appendix IV groundwater monitoring parameters above the established GWPS. AP-1 will continue to be monitored in accordance with the assessment monitoring program pursuant to 40 CFR § 257.95. An assessment of corrective measures was initiated following the provisions of 40 CFR § 257.96. Pursuant to 40 CFR 257.95(g)(1)(iv), the additional delineation wells and surface water monitoring locations may continue to be sampled as part of the ongoing semi-annual assessment monitoring program.

8.0 CONCLUSIONS AND FUTURE ACTIONS

This *2021 Semi-Annual Groundwater Monitoring and Corrective Action Report, Georgia Power Plant McDonough-Atkinson - Ash Pond 1 (AP-1)* was prepared to fulfill the requirements of US EPA CCR rule 40 CFR 257 Subpart D and Georgia EPD rule 391-3-4-.10.

The groundwater flow directions interpreted during most recent sampling event is consistent with historical evaluations and the monitoring well network continues to effectively monitor the uppermost aquifer in the vicinity of AP-1.

Review of analytical results and statistical analyses developed for the Site indicates confirmed SSIs of Appendix III above background and SSLs of Appendix IV above the established GWPS. In accordance with 40 CFR § 257.96, Georgia Power has initiated an assessment of corrective measures study for the identified SSLs. Additional data collected at the site during delineation activities suggest a natural occurrence of molybdenum in the underlying metamorphic rocks. Results from rock analyses completed at B-113D indicate naturally occurring molybdenum is present in the rock in the form of molybdenite. Occurrence of molybdenite crystals in the biotite gneiss including the more felsic portions indicates that molybdenum in groundwater in wells DGWC-68A, B-110D, and B 113D could be derived from the molybdenum-rich rocks. As such, vertical delineation for molybdenum at DGWC-68A is ongoing pending further evaluation of this natural source.

Based on the findings presented herein, Plant McDonough will continue with assessment groundwater monitoring and reporting. The next sampling event is tentatively scheduled for January of 2022.

9.0 REFERENCES

Golder, 2019, *2019 First Annual Groundwater Monitoring and Corrective Action Report*, Georgia Power Company – Plant McDonough-Atkinson Ash Pond 1, August 1, 2019.

Golder, 2020a, Piezometer Installation Report, Piezometers B-99 through B-100, Georgia Power Company, Plant McDonough-Atkinson, November 23, 2020.

Golder, 2020b, *Assessment of Corrective Measures*, Georgia Power Company, Plant McDonough-Atkinson Ash Pond 1, December 4, 2020.

Golder, 2021a, *Piezometer Installation Report (B-101D through B-111D)*, Georgia Power Company, Plant McDonough-Atkinson, February 12, 2021.

Golder, 2021b, *Piezometer Installation Report (B-112D and B-113D, B-115D through B-120D)*, Georgia Power Company, Plant McDonough-Atkinson, June 4, 2021.

Golder, 2022, Hydrogeologic Assessment Report, Georgia Power Company – Plant McDonough-Atkinson, February 15, 2022.

Groundwater Stats Consulting, 2019, *Georgia Power Company's Plant McDonough Ash Pond 1 (AP-1) Statistical Analysis Plan*, April 2019.

Heath, R.C., 1982, Basic Ground-Water Hydrology. Water Supply Paper 2220. U.S. Geological Survey, Federal Center, Box 25425, Denver, Colorado.

US EPA, 1996, *Soil Guidance Manual*.

US EPA, 2001, *Environmental Investigations Standard Operating Procedures and Quality Assurance Manual*, November 2001.

US EPA, 2009, *Statistical Analysis of Groundwater Monitoring Data at RCRA Facilities, Unified Guidance*. Office of Resource Conservation and Recovery – Program Implementation and Information Division, March 2009.

US EPA, 2011, *Data Validation Standard Operating Procedures*, Science and Ecosystem Support Division. Revision IV, Athens, GA, September 2011.

US EPA, 2016, *Operating Procedures for Surface Water Sampling*, Science and Ecosystem Support Division, SESDPROC-201-R4, December 16, 2016.

US EPA, 2020, *Field Equipment Cleaning and Decontamination*, Laboratory Services and Applied Science Division, LSASDPROC-205-R4. June 22, 2020.

Tables

TABLE 1
SUMMARY OF MONITORING WELL, ASSESSMENT WELL AND PIEZOMETER CONSTRUCTION DATA
 Georgia Power Company - Plant McDonough
 Atlanta, Georgia

Well-ID	Hydraulic Location	Screened Media	NAD 83 Northing	NAD 83 Easting	Top of Casing Elevation (feet NAVD 88)	Ground Surface Elevation (feet NAVD 88)	Total Well Depth (feet bgs)	Top of Screen Elevation (feet NAVD 88)	Bottom of Screen Elevation (feet NAVD 88)	Screen Length (feet)	Date of Installation
ASH POND 1 (AP-1) DETECTION MONITORING WELL NETWORK											
DGWA-53	Upgradient	Upper Bedrock	1393472.8	2201668.8	844.26	841.3	28.9	823.7	813.7	10	9/24/2016
DGWA-70A	Upgradient	Overburden	1390481.4	2200591.6	808.52	805.8	59.3	756.9	746.9	10	5/10/2017
DGWA-71	Upgradient	Overburden	1393963.3	2201714.8	863.84	861.2	43.8	827.8	817.8	10	2/28/2017
DGWC-37	Downgradient	Overburden	1390482.2	2200919.8	766.21	763.7	39.7	734.4	724.4	10	11/28/2012
DGWC-38	Downgradient	Overburden	1390362.7	2201148.6	757.43	754.7	25.0	740.0	730.0	10	11/29/2012
DGWC-39	Downgradient	Overburden	1390303.6	2201540.1	759.89	757.0	21.2	746.2	736.2	10	11/6/2012
DGWC-40	Downgradient	Overburden	1390625.7	2201825.9	779.06	776.2	34.9	751.7	741.7	10	11/5/2012
DGWC-67	Downgradient	Overburden	1390953.8	2200830.7	766.70	767.0	56.3	720.7	710.7	10	3/14/2017
DGWC-68A	Downgradient	Overburden	1391301.2	2200734.9	765.33	765.4	29.8	746.0	736.0	10	4/20/2017
DGWC-69	Downgradient	Overburden	1391585.0	2200657.1	763.75	764.0	24.3	749.7	739.7	10	3/16/2017
ASH POND 1 (AP-1) ASSESSMENT MONITORING WELL NETWORK											
B-62	Downgradient	Upper Bedrock	1389828.1	2201811.2	760.08	760.4	39.9	730.7	720.7	10	10/4/2016
B-100	Downgradient	Overburden	1390254.8	2202242.1	777.95	775.3	44.8	740.5	730.5	10	7/8/2020
B-105D	Downgradient	Upper Bedrock	1390634.5	2201831.9	779.01	776.0	70.00	716.0	706.0	10	10/19/2020
B-112D	Downgradient	Upper Bedrock	1391564.2	2200664.1	765.58	766.1	55	721.4	711.4	10	3/22/2021
B-113D	Downgradient	Upper Bedrock	1391264.6	2200719.2	758.22	758.8	85	684.4	674.4	10	3/30/2021

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ASH POND 2 and ASH PONDS 3/4 (AP-2, 3/4) DETECTION MONITORING WELL NETWORK											
DGWA-53	Upgradient	Upper Bedrock	1393472.8	2201668.8	844.26	841.3	28.9	823.7	813.7	10	9/24/2016
DGWA-70A	Upgradient	Overburden	1390481.4	2200591.6	808.52	805.8	59.3	756.9	746.9	10	5/10/2017
DGWA-71	Upgradient	Overburden	1393963.3	2201714.8	863.84	861.2	43.8	827.8	817.8	10	2/28/2017
DGWC-2	Downgradient	Overburden/Upper Bedrock	1393958.0	2202119.5	850.88	848.3	49.0	809.6	799.6	10	10/2/2012
DGWC-4	Downgradient	Overburden	1394171.5	2202662.4	814.85	812.1	45.0	777.4	767.4	10	10/3/2012
DGWC-5	Downgradient	Overburden/Upper Bedrock	1394306.3	2202965.1	791.75	788.7	30.0	769.0	759.0	10	10/4/2012
DGWC-8	Downgradient	Overburden	1394322.2	2203882.1	826.38	824.1	49.1	785.4	775.4	10	10/10/2012
DGWC-9	Downgradient	Overburden	1394055.9	2204170.0	824.35	821.8	30.0	802.2	792.2	10	10/10/2012
DGWC-10	Downgradient	Overburden	1393818.3	2204201.1	823.55	820.9	45.4	785.9	775.9	10	10/11/2012
DGWC-11	Downgradient	Overburden	1393547.1	2204166.2	800.57	798.1	49.1	759.3	749.3	10	10/15/2012
DGWC-12	Downgradient	Overburden	1393149.4	2204128.3	773.86	771.2	25.1	756.5	746.5	10	10/15/2012
DGWC-13	Downgradient	Overburden	1392881.1	2204084.6	794.10	791.3	43.8	757.9	747.9	10	11/29/2012
DGWC-14	Downgradient	Overburden/Upper Bedrock	1392574.2	2204013.3	792.40	789.8	34.3	765.9	755.9	10	12/18/2012
DGWC-15	Downgradient	Overburden	1392544.1	2203679.0	824.50	821.5	67.1	764.8	754.8	10	11/29/2012
DGWC-17	Downgradient	Overburden	1392645.6	2203051.0	837.05	834.2	44.5	800.0	790.0	10	1/9/2013
DGWC-19	Downgradient	Overburden	1392342.6	2202601.0	825.46	822.9	39.8	793.5	783.5	10	3/12/2013
DGWC-20	Downgradient	Overburden	1392164.5	2202315.6	822.14	819.8	39.7	790.7	780.7	10	3/5/2013
DGWC-21	Downgradient	Overburden/Upper Bedrock	1392067.5	2202063.5	816.28	813.5	69.0	754.9	744.9	10	10/31/2012
DGWC-22	Downgradient	Upper Bedrock	1392126.3	2201791.9	816.59	813.7	60.0	764.0	754.0	10	10/25/2012
DGWC-23	Downgradient	Upper Bedrock	1392239.7	2201582.0	818.37	815.7	60.1	765.9	755.9	10	10/25/2012
DGWC-42	Downgradient	Overburden	1391327.8	2201870.2	804.68	802.0	50.4	762.1	752.1	10	11/12/2012
DGWC-47	Downgradient	Overburden/Upper Bedrock	1391553.8	2202610.5	797.45	794.3	28.8	775.9	765.9	10	6/23/2016
DGWC-48	Downgradient	Overburden/Upper Bedrock	1391314.6	2202290.2	788.33	785.2	30.0	765.6	755.6	10	6/22/2016

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ASH POND 2 and ASH PONDS 3/4 (AP-2, 3/4) ASSESSMENT MONITORING WELL NETWORK											
B-56	Downgradient	Overburden	1393957.9	2204187.8	823.59	821.0	45.0	786.4	776.4	10	10/3/2016
B-62	Downgradient	Upper Bedrock	1389828.1	2201811.2	760.08	760.4	39.9	730.7	720.7	10	10/4/2016
B-63	Downgradient	Overburden	1390999.1	2202978.1	777.10	777.3	46.0	741.8	731.8	10	10/6/2016
B-66	Downgradient	Overburden	1393858.2	2204277.5	815.90	813.3	55.3	768.3	758.3	10	11/16/2016
B-77	Downgradient	Overburden	1390948.7	2202942.0	776.86	777.1	42	745.1	735.1	10	9/17/2019
B-82	Downgradient	Overburden	1393750.0	2204258.1	810.07	807.5	45	773.0	763.0	10	9/21/2019
B-83	Downgradient	Overburden	1390735.5	2202695.6	776.98	777.1	48.6	738.5	728.5	10	9/30/2019
B-88	Downgradient	Overburden	1394401.1	2203738.3	820.07	817.0	72	755.0	745.0	10	11/15/2019
B-92	Downgradient	Overburden	1394392.7	2203026.7	785.08	785.3	24.6	770.7	760.7	10	12/11/2019
B-93	Downgradient	Overburden	1394348.7	2202946.7	789.07	789.2	28.9	770.3	760.3	10	12/12/2019
B-97	Downgradient	Overburden/Upper Bedrock	1394430.0	2203008.3	786.29	786.6	31	765.3	755.3	10	2/11/2020
B-98	Downgradient	Overburden	1394392.5	2202934.0	789.67	789.8	19.4	780.8	770.8	10	2/10/2020
B-100	Downgradient	Overburden	1390254.8	2202242.1	777.95	775.3	44.8	740.5	730.5	10	7/8/2020
B-101D	Downgradient	Overburden/Upper Bedrock	1394063.6	2204168.2	824.29	821.2	75.00	756.3	746.3	10	11/12/2020
B-102D	Downgradient	Upper Bedrock	1393828.4	2204200.4	823.42	820.6	85.00	746.2	736.2	10	11/10/2020
B-104D	Downgradient	Upper Bedrock	1391318.3	2202298.5	787.90	785.3	60.00	735.3	725.3	10	10/20/2020
B-106D	Downgradient	Upper Bedrock	1394327.1	2203869.2	826.21	823.5	80.00	754.1	744.1	10	11/13/2020
B-107D	Downgradient	Upper Bedrock	1392334.5	2202596.4	823.38	820.6	85.75	745.5	735.5	10	10/28/2020
B-108D	Downgradient	Upper Bedrock	1392156.1	2202312.5	821.13	818.4	80.00	749.4	739.4	10	10/27/2020
B-109D	Downgradient	Upper Bedrock	1393957.5	2202127.0	850.73	847.8	100.00	758.4	748.4	10	10/31/2020
B-111D	Downgradient	Upper Bedrock	1394303.4	2202956.4	791.87	789.1	85.00	714.9	704.9	10	11/3/2020
B-115D	Downgradient	Upper Bedrock	1391265.3	2202580.7	789.17	786.4	80	717.2	707.2	10	3/20/2021
B-120D	Downgradient	Upper Bedrock	1394047.2	2202436.4	836.42	834.0	70	775.0	765.0	10	3/6/2021

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ASH POND 1, ASH POND 2 AND ASH POND 3/4 SUPPLEMENTAL SAMPLING NETWORK											
B-90	Downgradient	Overburden	1394501.0	2203212.6	784.00	784.2	33.4	760.8	750.8	10	12/10/2019
B-91	Downgradient	Overburden	1394447.1	2203123.9	782.98	783.1	34.6	758.5	748.5	10	12/11/2019
B-95	Downgradient	Overburden	1394518.6	2203167.7	784.00	784.3	33.3	761.3	751.3	10	2/11/2020
B-96	Downgradient	Overburden	1394478.7	2203099.3	784.92	785.3	33.1	762.2	752.2	10	2/10/2020
B-99	Downgradient	Overburden	1394524.2	2203084.5	782.39	782.6	12.3	775.3	770.3	5	7/7/2020
B-116D	Upgradient	Upper Bedrock	1390483.7	2200611.0	807.82	805.3	90	726.1	716.1	10	3/8/2021
B-117D	Upgradient	Upper Bedrock	1393963.8	2201727.3	863.82	861.2	75	796.5	786.5	10	3/17/2021
B-118	Upgradient	Upper Bedrock	1391219.3	2200449.7	807.70	805.0	75	740.2	730.2	10	3/9/2021
B-119D	Upgradient	Upper Bedrock	1391236.4	2200446.6	807.15	804.5	105	709.8	699.8	10	3/16/2021
PIEZOMETERS											
B-3	Downgradient	Overburden/Upper Bedrock	1394045.1	2202411.5	837.78	835.0	37.0	808.3	798.3	10	10/3/2012
B-6	Downgradient	Overburden	1394419.5	2203266.5	789.47	786.5	35.4	761.5	751.5	10	10/9/2012
B-7	Downgradient	Overburden	1394374.6	2203596.1	809.16	806.1	25.2	791.3	781.3	10	10/9/2012
B-16	Downgradient	Overburden	1392595.1	2203315.4	826.47	823.6	43.7	790.2	780.2	10	12/19/2012
B-18	Downgradient	Overburden	1392521.0	2202875.5	826.56	823.9	32.6	801.5	791.5	10	1/10/2013
B-24	Downgradient	Upper Bedrock	1392479.9	2201450.0	822.11	819.3	79.1	751.0	741.0	10	10/24/2012
B-25	Downgradient	Upper Bedrock	1392813.3	2201502.7	836.54	833.5	54.8	789.1	779.1	10	10/24/2012
B-26	Downgradient	Upper Bedrock	1393105.6	2201550.4	853.60	850.6	49.3	811.7	801.7	10	10/23/2012
B-28	Downgradient	Overburden/Upper Bedrock	1391967.4	2201679.2	816.08	813.3	69.4	754.3	744.3	10	10/31/2012
B-29	Downgradient	Overburden	1391890.0	2201422.0	816.43	813.5	54.4	769.4	759.4	10	1/11/2013
B-31	Downgradient	Upper Bedrock	1392034.3	2200928.5	797.47	794.9	45.1	760.2	750.2	10	1/22/2013
B-41	Downgradient	Overburden	1390920.8	2201751.9	795.20	792.4	60.0	743.0	733.0	10	11/14/2012
B-50	Downgradient	Overburden	1391657.1	2201841.0	809.67	809.2	36.0	784.4	774.4	10	6/24/2016
B-51	Downgradient	Overburden	1390501.2	2200906.5	765.92	763.3	65.0	708.3	698.3	10	6/27/2016
B-52	Downgradient	Overburden	1392308.3	2201314.8	822.89	820.3	50.0	781.4	771.4	10	9/28/2016

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PIEZOMETERS											
B-54	Downgradient	Overburden/Upper Bedrock	1394423.5	2203140.7	785.46	782.6	34.2	758.8	748.8	10	9/26/2016
B-55	Downgradient	Overburden	1394142.6	2204147.9	825.12	822.9	52.0	781.9	771.9	10	9/22/2016
B-57	Downgradient	Upper Bedrock	1391396.3	2202736.9	789.04	786.0	50.5	746.0	736.0	10	9/24/2016
B-58	Downgradient	Overburden	1391125.7	2202426.5	788.17	785.2	45.0	750.7	740.7	10	9/23/2016
B-59	Downgradient	Overburden/Upper Bedrock	1394349.1	2203001.1	788.00	785.5	30.3	765.3	755.3	10	9/23/2016
B-60	Downgradient	Overburden	1391100.7	2202881.6	782.13	779.2	49.8	739.9	729.9	10	9/29/2016
B-61	Downgradient	Overburden	1390957.8	2202505.8	782.09	779.0	51.9	737.5	727.5	10	9/29/2016
B-64	Downgradient	Overburden	1394381.9	2203031.3	785.83	786.1	30.4	766.1	756.1	10	11/2/2016
B-65	Downgradient	Overburden/Upper Bedrock	1394381.2	2204050.8	821.95	822.3	45.4	787.9	777.9	10	11/15/2016
B-68	Downgradient	Overburden	1391298.2	2200714.2	758.68	759.0	18.0	751.0	741.0	10	3/16/2017
B-72	Downgradient	Overburden	1391242.2	2200723.9	758.85	758.09	21.9	746.6	736.6	10	4/19/2017
B-73	Downgradient	Overburden	1391352.4	2200697.5	759.46	758.85	15.8	753.5	743.5	10	4/19/2017
B-74	Downgradient	Overburden	1391279.8	2200665.3	759.44	758.96	16.5	748.2	743.2	5	4/25/2017
B-78	Downgradient	Overburden/Upper Bedrock	1394328.2	2202958.2	790.75	788.0	30	768.0	758.5	10	9/22/2019
B-79	Downgradient	Overburden	1394458.6	2203223.0	788.66	785.9	34.93	761.0	751.5	10	9/21/2019
B-80	Downgradient	Overburden	1394372.6	2203533.9	804.47	801.8	30	782.0	772.5	10	9/20/2019
B-81	Downgradient	Overburden	1394364.9	2203741.1	820.56	817.7	50	778.5	768.5	10	9/22/2019
B-84	Downgradient	Overburden	1390411.9	2202241.9	776.34	776.6	49.1	737.5	727.5	10	10/1/2019
B-85	Downgradient	Overburden/Upper Bedrock	1394433.4	2203134.5	782.54	782.7	34.5	758.5	748.5	10	11/18/2019
B-86	Downgradient	Overburden/Upper Bedrock	1394480.0	2203206.6	784.29	784.6	34.1	760.5	750.5	10	11/18/2019

TABLE 1
SUMMARY OF MONITORING WELL, ASSESSMENT WELL AND PIEZOMETER CONSTRUCTION DATA
 Georgia Power Company - Plant McDonough
 Atlanta, Georgia

Well-ID	Hydraulic Location	Screened Media	NAD 83 Northing	NAD 83 Easting	Top of Casing Elevation (feet NAVD 88)	Ground Surface Elevation (feet NAVD 88)	Total Well Depth (feet bgs)	Top of Screen Elevation (feet NAVD 88)	Bottom of Screen Elevation (feet NAVD 88)	Screen Length (feet)	Date of Installation
PIEZOMETERS											
B-87	Downgradient	Overburden	1394401.9	2203531.3	803.37	800.4	42	768.7	758.7	10	11/17/2019
B-89	Downgradient	Upper Bedrock	1394398.4	2204049.4	822.36	822.6	49.5	783.1	773.1	10	11/19/2019
B-94	Downgradient	Overburden	1394402.0	2203513.7	801.74	799.2	45.24	764.6	754.6	10	1/23/2020
B-103D	Downgradient	Upper Bedrock	1391543.5	2202614.4	795.96	793.8	70.00	733.8	723.8	10	10/15/2020
B-110D	Downgradient	Upper Bedrock	1391294.4	2200736.0	764.61	764.7	65.00	711.7	701.7	10	11/17/2020

Notes:

1. bgs = below ground surface
2. Coordinate System: NAD 1983 State Plane Georgia West (U.S. feet)
3. NAD - North American Datum; NAVD - North American Vertical Datum

TABLE 2
GROUNDWATER SAMPLING EVENT SUMMARY
 Georgia Power Company - Plant McDonough Ash Pond 1
 Atlanta, Georgia

Well ID	Hydraulic Location	Summary of Sampling Events		Status of Monitoring Well
		September 2021		
Purpose of Sampling Event		Detection/ Assessment		
ASH POND 1 (AP-1) MONITORING WELL NETWORK				
DGWA-53	Upgradient	X		Assessment
DGWA-70A	Upgradient	X		Assessment
DGWA-71	Upgradient	X		Assessment
DGWC-37	Downgradient	X		Assessment
DGWC-38	Downgradient	X		Assessment
DGWC-39	Downgradient	X		Assessment
DGWC-40	Downgradient	X		Assessment
DGWC-67	Downgradient	X		Assessment
DGWC-68A	Downgradient	X		Assessment
DGWC-69	Downgradient	X		Assessment
ASH POND 1 (AP-1) ASSESSMENT MONITORING WELL NETWORK				
B-62	Downgradient	X		Assessment
B-100	Downgradient	X		Assessment
B-105D	Downgradient	X		Assessment
B-112D	Downgradient	X		Assessment
B-113D	Downgradient	X		Assessment
ASH POND 1 (AP-1) SUPPLEMENTAL SAMPLING				
B-116D	Upgradient	X		Supplemental
B-117D	Upgradient	X		Supplemental
B-118D	Upgradient	X		Supplemental
B-119D	Upgradient	X		Supplemental

TABLE 3
SUMMARY OF GROUNDWATER ELEVATIONS
 Georgia Power Company - Plant McDonough
 Atlanta, Georgia

Well ID	Top of Casing Elevation (feet)	Groundwater Elevation (feet)
		10/27/2021
ASH POND 1 (AP-1) MONITORING WELLS		
DGWA-53	844.26	829.75
DGWA-70A	808.52	766.90
DGWA-71	863.84	835.19
DGWC-37	766.21	752.28
DGWC-38	757.43	751.08
DGWC-39	759.89	752.00
DGWC-40	779.06	760.54
DGWC-67	766.70	756.39
DGWC-68A	765.33	754.97
DGWC-69	763.75	757.55
ASH POND 2 and ASH PONDS 3/4 (AP-2, 3/4) MONITORING WELLS		
DGWA-53	844.26	829.75
DGWA-70A	808.52	766.90
DGWA-71	863.84	835.19
DGWC-2	850.88	820.66
DGWC-4	814.85	790.13
DGWC-5	791.75	781.04
DGWC-8	826.38	787.64
DGWC-9	824.35	798.22
DGWC-10	823.55	794.64
DGWC-11	800.57	785.55
DGWC-12	773.86	762.68
DGWC-13	794.10	760.25
DGWC-14	792.40	771.99
DGWC-15	824.50	784.44
DGWC-17	837.05	802.35
DGWC-19	825.46	800.23
DGWC-20	822.14	799.51
DGWC-21	816.28	799.93
DGWC-22	816.59	795.57
DGWC-23	818.37	795.74
DGWC-42	804.68	775.13
DGWC-47	797.45	777.86
DGWC-48	788.33	773.68

TABLE 3
SUMMARY OF GROUNDWATER ELEVATIONS
 Georgia Power Company - Plant McDonough
 Atlanta, Georgia

Well ID	Top of Casing Elevation (feet)	Groundwater Elevation (feet)
		10/27/2021
PIEZOMETERS		
B-3	837.78	801.63
B-6	789.47	783.05
B-7	809.16	784.50
B-16	826.47	792.85
B-18	826.56	803.08
B-24	822.11	804.48
B-25	836.54	818.52
B-26	853.60	825.71
B-28	816.08	785.73
B-29	816.43	787.34
B-31	797.47	763.41
B-41	795.20	770.17
B-50	809.67	787.79
B-51	765.92	752.76
B-52	822.89	797.81
B-54	785.46	779.36
B-55	825.12	798.84
B-56	823.59	795.43
B-57	789.04	770.89
B-58	788.17	769.31
B-59	788.00	779.88
B-60	782.13	751.61
B-61	782.09	763.66
B-62	760.08	744.95
B-63	777.10	748.75
B-64	785.83	779.28
B-65	821.95	801.83
B-66	815.90	796.40
B-68	758.68	754.70
B-72	758.46	754.96
B-73	759.21	754.71
B-74	759.06	754.90
B-76	760.53	745.71
B-77	776.86	747.48
B-78	790.75	779.65
B-79	788.66	781.58
B-80	804.47	784.84
B-81	820.56	784.31

TABLE 3
SUMMARY OF GROUNDWATER ELEVATIONS
 Georgia Power Company - Plant McDonough
 Atlanta, Georgia

Well ID	Top of Casing Elevation (feet)	Groundwater Elevation (feet)
		10/27/2021
PIEZOMETERS		
B-82	810.07	793.97
B-83	776.98	746.58
B-84	776.34	745.42
B-85	782.54	779.14
B-86	784.29	782.10
B-87	803.37	784.94
B-88	820.07	783.58
B-89	822.36	796.56
B-90	784.00	781.97
B-91	782.98	779.18
B-92	785.08	779.36
B-93	789.07	780.57
B-94	801.74	784.86
B-95	784.00	781.90
B-96	784.92	778.88
B-97	786.29	779.84
B-98	789.67	780.15
B-99	782.39	778.63
B-100	777.95	744.70
B-101D	824.29	793.84
B-102D	823.42	791.56
B-103D	795.96	782.28
B-104D	787.90	780.44
B-105D	779.01	760.75
B-106D	826.21	787.01
B-107D	823.38	800.95
B-108D	821.13	800.27
B-109D	850.73	811.87
B-110D	764.61	755.69
B-111D	791.87	780.07
B-112D	765.58	757.86
B-113D	758.22	756.21
B-115D	789.17	768.96
B-116D	807.82	764.80
B-117D	863.82	834.63
B-118	807.70	756.15
B-119D	807.15	759.14
B-120D	836.42	801.72

Notes:

1. Elevation data recorded in feet North American Vertical Datum (NAVD)
2. Survey data for monitoring wells and piezometers provided by Metro Engineering.

TABLE 4
GROUNDWATER VELOCITY CALCULATIONS - OCTOBER 2021
 Georgia Power Company - Plant McDonough
 Atlanta, Georgia

Flow Paths	Groundwater Elevation (feet msl)	Δh (feet) ¹	Δl (feet) ²	Hydraulic Gradient ($\Delta h/\Delta l$) ³	Average Hydraulic Conductivity, K (centimeter per second) ⁵	Assumed Effective Porosity (n_e) ⁶	Average Linear Groundwater Velocity	
							(feet per day) ⁴	(feet per year) ⁴
ASH POND 1 (AP-1)								
B-29/DGWC-68A	787.34	32.37	900	0.036	0.00077	0.2	0.39	143
	754.97							
B-28/DGWC-37	785.73	33.45	1700	0.020	0.00077	0.2	0.21	78
	752.28							
B-50/DGWC-39	787.79	35.79	1400	0.026	0.00077	0.2	0.28	102
	752.00							

Notes:

1. Δh = Change in groundwater elevation
2. Δl = Distance along flow path
3. $I = \Delta h / \Delta l$
4. Velocity = $(I * K)/n_e$
5. Hydraulic conductivity based on historic aquifer performance tests
6. Assumed effective porosities for overburden was based on the default values recommended by USEPA for a silty sand-type soil (1996). Assumed effective porosity for upper bedrock was derived from Daniel and Dahlen (2002) and Dowd and Marshall (1995).

TABLE 5
ANALYTICAL DATA SUMMARY
Ash Pond 1 - September - October 2021
 Georgia Power Company - Plant McDonough
 Atlanta, Georgia

Analyte	Units	Well ID									
		DGWA-53	DGWA-70A	DGWA-71	DGWC-37	DGWC-38	DGWC-39	DGWC-40	DGWC-67	DGWC-68A	DGWC-68A
		9/9/2021	9/9/2021	9/8/2021	9/16/2021	9/15/2021	9/17/2021	9/14/2021	9/16/2021	9/16/2021	10/27/2021*
Appendix III											
BORON, TOTAL	mg/L	0.065	< 0.0086	< 0.0086	1.4	2.8	2.8	0.70	3.4	1.3	--
CALCIUM, TOTAL	mg/L	18.3	5.30	6.10	63.0	88.3	98.6	45.1	46.0	60.6	--
CHLORIDE, TOTAL	mg/L	1.80	1.90	5.90	5.60	7.60	8.30	16.7	7.90	3.40	--
FLUORIDE, TOTAL	mg/L	0.099 J	< 0.050	< 0.050	0.084 J	0.060 J	0.13	0.13	0.069 J	0.55	--
pH	S.U.	6.41	5.50	5.76	6.33	6.08	6.49	4.67	6.20	6.79	6.56
SULFATE, TOTAL	mg/L	11.9	< 0.50	6.10	95.0	219	156	186	101	22.3	--
TOTAL DISSOLVED SOLIDS	mg/L	131	53.0	75.0	278	474	446	347	282	259	--
Appendix IV											
ANTIMONY, TOTAL	mg/L	< 0.00078	0.0015 J	< 0.00078	< 0.00078	< 0.00078	< 0.00078	< 0.00078	< 0.00078	< 0.00078	--
ARSENIC, TOTAL	mg/L	< 0.0011	< 0.0011	< 0.0011	< 0.0011	< 0.0011	< 0.0011	< 0.0011	< 0.0011	0.46	0.0016 J
BARIUM, TOTAL	mg/L	0.099	0.038	0.025	0.083	0.032	0.090	0.027	0.088	0.13	0.086
BERYLLIUM, TOTAL	mg/L	< 0.000054	0.000089 J	0.000091 J	0.000059 J	< 0.000054	< 0.000054	0.0032	< 0.000054	< 0.000054	--
CADMIUM, TOTAL	mg/L	< 0.00011	< 0.00011	< 0.00011	0.00013 J	0.00021 J	< 0.00011	0.00086	< 0.00011	< 0.00011	--
CHROMIUM, TOTAL	mg/L	< 0.0011	< 0.0011	< 0.0011	< 0.0011	< 0.0011	< 0.0011	0.0021 J	< 0.0011	0.0014 J	< 0.0011
COBALT, TOTAL	mg/L	0.0064	< 0.00039	< 0.00039	< 0.00039	0.0016 J	0.0076	0.050	0.0012 J	0.0032 J	< 0.00039
FLUORIDE, TOTAL	mg/L	0.099 J	< 0.050	< 0.050	0.084 J	0.060 J	0.13	0.13	0.069 J	0.55	--
LEAD, TOTAL	mg/L	< 0.00089	< 0.00089	< 0.00089	< 0.00089	< 0.00089	< 0.00089	< 0.00089	< 0.00089	< 0.00089	--
LITHIUM, TOTAL	mg/L	0.0091 J	< 0.00073	0.0013 J	0.0021 J	0.0029 J	< 0.00073	0.0030 J	0.0044 J	0.00082 J	--
MERCURY, TOTAL	mg/L	< 0.000078	< 0.000078	0.000096 J	< 0.000078	< 0.000078	< 0.000078	< 0.000078	< 0.000078	< 0.000078	--
MOLYBDENUM, TOTAL	mg/L	0.025	< 0.00074	< 0.00074	< 0.00074	0.00099 J	< 0.00074	< 0.00074	< 0.00074	0.18	--
RADIUM (226 + 228)	pCi/L	2.72	0.779	0.0510	0.691	2.37	0.911	1.80	0.201	1.74	--
SELENIUM, TOTAL	mg/L	< 0.0014	< 0.0014	< 0.0014	< 0.0014	< 0.0014	< 0.0014	0.0015 J	< 0.0014	< 0.0014	--
THALLIUM, TOTAL	mg/L	< 0.00018	< 0.00018	< 0.00018	< 0.00018	< 0.00018	< 0.00018	< 0.00018	< 0.00018	< 0.00018	--

Notes:

1. mg/L - milligrams per Liter
2. pCi/L - picocuries per Liter
3. S.U. - Standard Units
4. < indicates the substance was not detected above the analytical method detection limit (MDL). The value displayed is the method detection limit.
5. J indicates the substance was detected at such low levels that the precision of the laboratory instruments could not produce a reliable value. Therefore, the value displayed is qualified by the laboratory as an estimated number.
6. Radium data are a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurement.
7. Monitorig well DGWC-68A was resampled on October 27, 2021.

TABLE 5
ANALYTICAL DATA SUMMARY
Ash Pond 1 - September - October 2021
 Georgia Power Company - Plant McDonough
 Atlanta, Georgia

Analyte	Units	ASSESSMENT MONITORING WELLS						SUPPLEMENTAL SAMPLING			
		DGWC-69 44455.44097	B-62	B-100	B-105D	B-112D	B-113D	B-116D	B-117D	B-118	B-119D
			9/9/2021	9/13/2021	9/15/2021	9/16/2021	9/17/2021	9/9/2021	9/8/2021	9/8/2021	9/8/2021
BORON, TOTAL	mg/L	0.32	0.068	0.24	0.76	0.27	0.089	< 0.0086	< 0.0086	< 0.0086	0.018 J
CALCIUM, TOTAL	mg/L	18	29.2	51.5	72.7	28.4	44.1	9.90	11.3	5.00	20.2
CHLORIDE, TOTAL	mg/L	4.5	5.80	11.1	17.4	2.70	48.8	2.70	6.00	3.00	7.50
FLUORIDE, TOTAL	mg/L	0.11	0.14	< 0.050	0.078 J	0.34	0.87	< 0.050	0.058 J	< 0.050	0.16
pH	S.U.	6.16	6.31	5.27	6.38	6.74	7.97	6.02	6.00	6.01	6.88
SULFATE, TOTAL	mg/L	17.9	49.2	351	240	21.2	89.1	0.730 J	31.1	0.990 J	76.2
TOTAL DISSOLVED SOLIDS	mg/L	113	174	636	455	162	329	93.0	152	65.0	191
ANTIMONY, TOTAL	mg/L	< 0.00078	< 0.00078	< 0.00078	0.0082	< 0.00078	< 0.00078	< 0.00078	< 0.00078	< 0.00078	0.00087 J
ARSENIC, TOTAL	mg/L	0.023	< 0.0011	< 0.0011	< 0.0011	< 0.0011	< 0.0011	< 0.0011	< 0.0011	0.0011 J	0.0014 J
BARIUM, TOTAL	mg/L	0.078	0.021	0.021	0.037	0.0032 J	0.0048 J	0.017	0.048	0.021	0.0080
BERYLLIUM, TOTAL	mg/L	< 0.000054	0.00014 J	0.00053	< 0.000054	< 0.000054	< 0.000054	< 0.000054	< 0.000054	< 0.000054	< 0.000054
CADMIUM, TOTAL	mg/L	< 0.00011	< 0.00011	0.00029 J	< 0.00011	< 0.00011	< 0.00011	< 0.00011	< 0.00011	< 0.00011	< 0.00011
CHROMIUM, TOTAL	mg/L	< 0.0011	< 0.0011	< 0.0011	0.0012 J	0.0014 J	< 0.0011	< 0.0011	< 0.0011	< 0.0011	< 0.0011
COBALT, TOTAL	mg/L	< 0.00039	< 0.00039	0.035	0.0065	0.00054 J	< 0.00039	< 0.00039	0.00043 J	< 0.00039	0.00077 J
FLUORIDE, TOTAL	mg/L	0.11	0.14	< 0.050	0.078 J	0.34	0.87	< 0.050	0.058 J	< 0.050	0.16
LEAD, TOTAL	mg/L	< 0.00089	< 0.00089	< 0.00089	< 0.00089	< 0.00089	< 0.00089	< 0.00089	< 0.00089	< 0.00089	< 0.00089
LITHIUM, TOTAL	mg/L	0.0023 J	0.0094 J	0.0022 J	0.014 J	0.0038 J	0.013 J	0.0055 J	0.0069 J	0.0028 J	0.0028 J
MERCURY, TOTAL	mg/L	< 0.000078	< 0.000078	< 0.000078	< 0.000078	< 0.000078	< 0.000078	< 0.000078	< 0.000078	< 0.000078	< 0.000078
MOLYBDENUM, TOTAL	mg/L	0.0090 J	< 0.00074	< 0.00074	< 0.00074	0.032	0.074	< 0.00074	< 0.00074	0.0056 J	0.022
RADIUM (226 + 228)	pCi/L	2.06	1.70	0.774	2.01	0.241	1.08	0.887	0.695	0.0324	0.168
SELENIUM, TOTAL	mg/L	< 0.0014	< 0.0014	< 0.0014	< 0.0014	< 0.0014	< 0.0014	< 0.0014	< 0.0014	< 0.0014	< 0.0014
THALLIUM, TOTAL	mg/L	< 0.00018	< 0.00018	< 0.00018	< 0.00018	< 0.00018	< 0.00018	< 0.00018	< 0.00018	< 0.00018	< 0.00018

Notes:

1. mg/L - milligrams per Liter
2. pCi/L - picocuries per Liter
3. S.U. - Standard Units
4. < indicates the substance was not detected above the analytical method detection limit (MDL). The value displayed is the method detection limit.
5. J indicates the substance was detected at such low levels that the precision of the laboratory instruments could not produce a reliable value. Therefore, the value displayed is qualified by the laboratory as an estimated number.
6. Radium data are a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurement.
7. * indicates the analyte was resampled on October 27, 2021.

TABLE 6
SURFACE WATER ANALYTICAL DATA SUMMARY
Ash Pond1 - September 2021
 Georgia Power Company - Plant McDonough
 Atlanta, Georgia

Analyte	Units	SURFACE WATER SAMPLES										
		UT01_DS	UT01_US	UT02	UT03	CR+0.4	CR+0.2	Dewatering Downstream	Dewatering Upstream	CR-0.1	CR-0.2	CR-0.5
		3/9/2021	3/9/2021	3/9/2021	3/9/2021	9/7/2021	9/7/2021	9/7/2021	9/7/2021	9/7/2021	9/7/2021	9/7/2021
Appendix III												
Boron	mg/L	0.064	<0.040	0.063	0.054	< 0.040	< 0.040	< 0.040	0.073	< 0.040	0.046	< 0.040
Calcium	mg/L	12.2	14.1	13.2	12.7	6.7	6.6	7.3	6.7	6.6	6.6	6.5
Chloride	mg/L	10.4	11.2	10.7	10.4	9.9	9.7	9.8	9.9	9.8	9.8	9.6
Fluoride	mg/L	0.49	0.42	0.45	0.47	0.14	0.14	0.14	0.14	0.14	0.13	0.14
Sulfate	mg/L	12.9	12.6	14.2	13.4	7.0	6.4	10.4	6.5	8.0	7.3	6.3
Total Dissolved Solids	mg/L	96.0	80.0	89.0	84.0	77.0	73.0	83.0	82.0	78.0	77.0	75.0
Appendix IV												
Arsenic	mg/L	<0.0050	<0.0050	<0.0050	<0.0050	< 0.0050	< 0.0050	--	--	--	< 0.0050	< 0.0050
Cobalt	mg/L	--	--	--	--	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
Molybdenum	mg/L	<0.010	<0.010	<0.010	<0.010	< 0.010	< 0.010	--	--	--	--	--
Selenium	mg/L	<0.010	<0.010	<0.010	<0.010	--	--	--	--	--	< 0.0050	< 0.0050
Major Ions												
Alkalinity, Total as CaCO3	mg/L	32.2	40.0	34.9	33.3	26.6	26.9	26.4	28.0	26.8	27.5	27.1
Alkalinity, Bicarbonate (CaCO3)	mg/L	32.2	40.0	34.9	33.3	26.6	26.9	26.4	28.0	26.8	27.5	27.1
Magnesium	mg/L	2.8	2.9	2.8	2.8	2.9	2.7	2.9	2.8	2.7	2.8	2.6
Potassium	mg/L	2.8	2.8	2.7	2.7	3.4	3.3	3.2	3.4	3.2	3.3	3.1
Sodium	mg/L	10.5	11.7	10.9		10.0	9.9	9.6	10.1	9.4	9.7	9.2

Notes:

mg/L = milligrams per liter; ug/L - micrograms per liter; S. U. - Standard Units

< indicates the substance was not detected above the analytical reporting limit (RL). The value displayed is the RL.

"--" = analysis was not performed

TABLE 7
SUMMARY OF BACKGROUND LEVELS AND GWPS
 Georgia Power Company - Plant McDonough Ash Pond 1
 Atlanta, Georgia

Analyte	Units	Maximum Contaminant Level (MCL)	Rule Specified Limit	Site Specific Background September 2021 ^[1]	Federal GWPS ^[2]	State GWPS ^[3]
Antimony	mg/L	0.006	--	0.003 ^[4]	0.006	0.006
Arsenic	mg/L	0.01	--	0.005 ^[4]	0.01	0.01
Barium	mg/L	2	--	0.19	2	2
Beryllium	mg/L	0.004	--	0.0009	0.004	0.004
Cadmium	mg/L	0.005	--	0.0005 ^[4]	0.005	0.005
Chromium	mg/L	0.1	--	0.005 ^[4]	0.1	0.1
Cobalt	mg/L	NA	0.006	0.032	0.032	0.032
Fluoride	mg/L	4	--	0.42	4	4
Lead	mg/L	NA	0.015	0.001 ^[4]	0.015	0.001
Lithium	mg/L	NA	0.04	0.03 ^[4]	0.04	0.03
Mercury	mg/L	0.002	--	0.0002 ^[4]	0.002	0.002
Molybdenum	mg/L	NA	0.1	0.041	0.1	0.041
Radium (226 + 228)	pCi/L	5	--	5.61	5.61	5.61
Selenium	mg/L	0.05	--	0.005 ^[4]	0.05	0.05
Thallium	mg/L	0.002	--	0.001 ^[4]	0.002	0.002

Notes:

mg/L = milligrams per liter; pCi/L = picocuries per liter; NA = Not Available

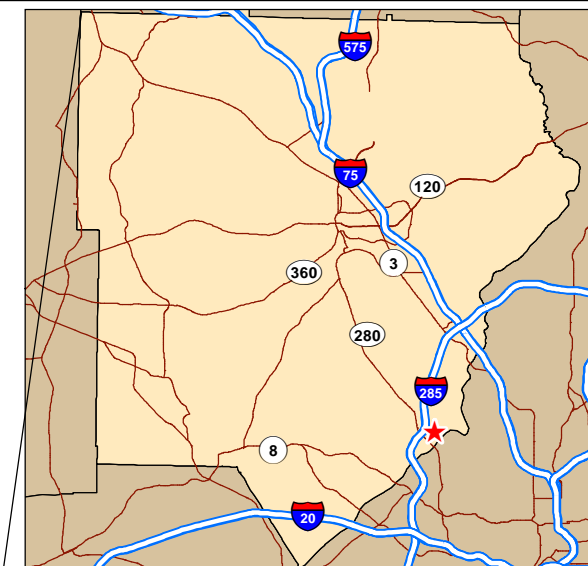
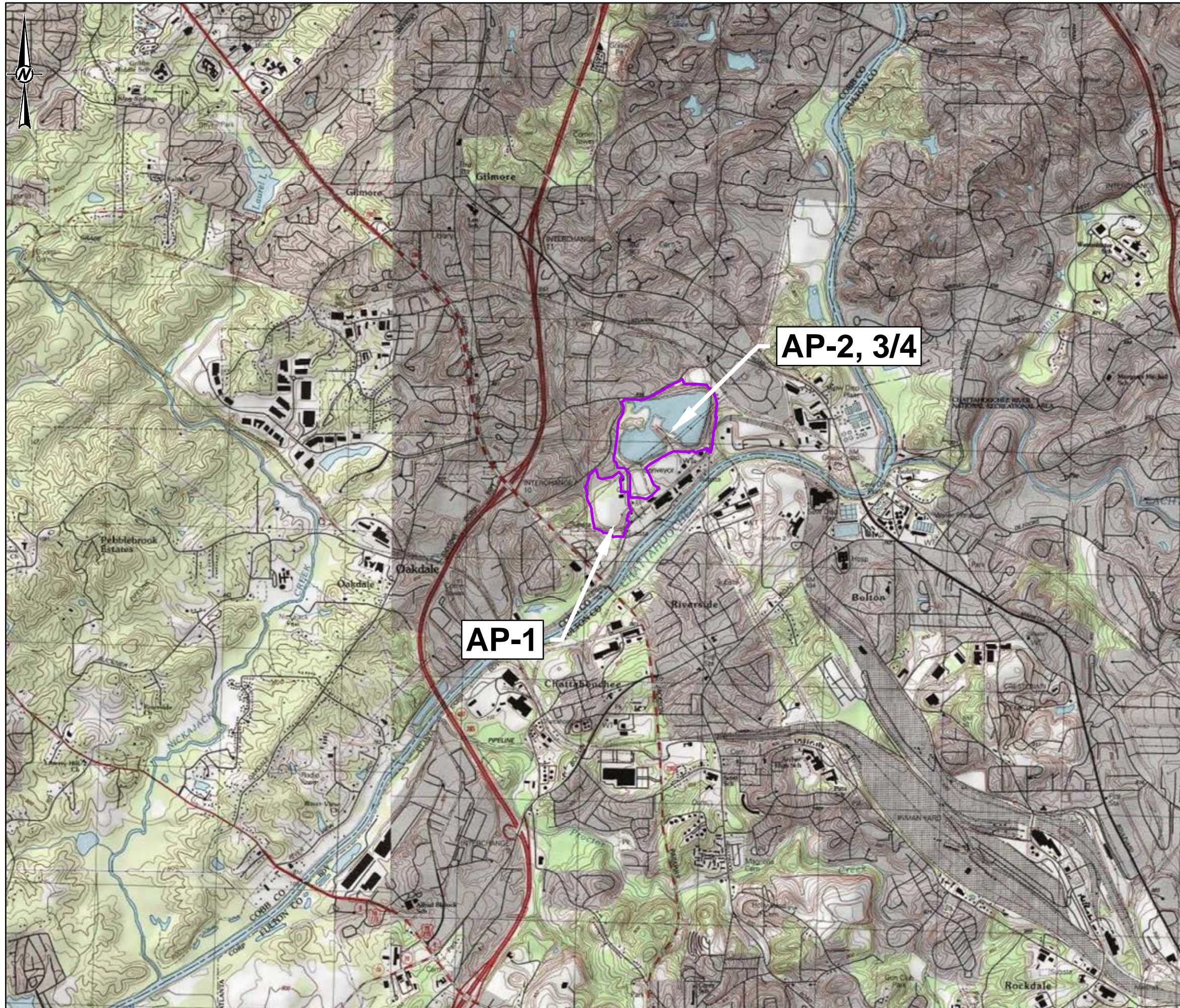
[1] The background limits are used when determining the groundwater protection standard (GWPS) under 40 CFR § 257.95(h) and 391-3-4-.10(6)(a).

[2] Under Federal CCR rules, the GWPS is: (i) the MCL or RSL, (ii) where the MCL or RSL is not established, the background concentration, or (iii) background levels for constituents where the background level is higher than the MCL or RSL.

[3] Under existing EPD rules, the GWPS is: (i) the MCL, (ii) where the MCL is not established, the background concentration, or (iii) background levels for constituents where the background level is higher than the MCL.

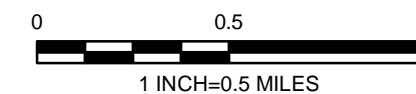
[4] The background tolerance limit (TL) used to evaluate GWPS for this analyte equals the laboratory specified reporting limit (RL). Per the Statistical Analysis Plan, and in accordance with the Unified Guidance, a non-parametric limit approach was used when the data set contains greater than 50% non-detect results for this analyte. Under this approach, the TL equals the highest value reported, for which is the laboratory RL. We also note that the values reported herein have been updated from the previously established GWPS which was determined based on estimated data. The modified GWPS also reflects additional outlier identification.

Figures



REFERENCE

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CLIENT
 GEORGIA POWER COMPANY
 PLANT MCDONOUGH



PROJECT
 2021 SEMI-ANNUAL GROUNDWATER MONITORING AND
 CORRECTIVE ACTION REPORT-ASH POND 1

TITLE
SITE LOCATION MAP

CONSULTANT	YYYY-MM-DD	2019-1-31
 GOLDER MEMBER OF WSP	PREPARED	SEB
	DESIGN	SEB
	CHECKED	DP
	REVIEWED/APPROVED	RPK

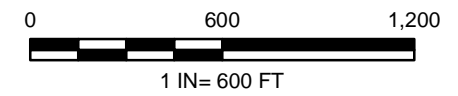
IF THIS MEASUREMENT DOES NOT MATCH WHAT IS SHOWN, THE SHEET HAS BEEN MODIFIED FROM ANS/B



- LEGEND**
- ◆ AP-1 MONITORING WELL
 - ◆ AP-2,3/4 MONITORING WELL
 - ◆ UPGRADIENT WELL
 - ◆ ASSESSMENT MONITORING WELLS
 - ◆ PIEZOMETER
 - ◆ DEWATERING WELL
 - ◆ SURFACE WATER MONITORING LOCATION
 - ▲ TEST PIT LOCATIONS
 - STAFF GAUGE
 - PROPERTY BOUNDARY
 - PERMIT BOUNDARY

NOTES
 1. ALL LOCATIONS AND BOUNDARIES ARE APPROXIMATE.

- REFERENCE**
1. AERIAL IMAGE DATED NOVEMBER 2019 FROM GOOGLE EARTH AND AUGUST 04, 2021 AND OCTOBER 08, 2021 FROM COOPER, BARNETTE & PAGE, INC. (CBP).
 2. COORDINATE SYSTEM: NAD 1983 STATE PLANE GEORGIA WEST (U.S. FEET).
 3. MONITORING WELL/PIEZOMETER LOCATIONS AND ELEVATIONS SURVEYED BY METRO ENGINEERING AND SURVEYING COMPANY IN AUGUST 2020 WITH ADDITIONAL SURVEY PROVIDED IN JANUARY 2021 AND MAY 2021.



CLIENT
 GEORGIA POWER COMPANY
 PLANT MCDONOUGH

PROJECT
 2021 SEMI-ANNUAL GROUNDWATER MONITORING AND
 CORRECTIVE ACTION REPORT-ASH POND 1

TITLE
**MONITORING WELL, PIEZOMETER AND SURFACE WATER
 LOCATION MAP**

CONSULTANT	YYYY-MM-DD	2022-02-02
	PREPARED	DJC
	DESIGN	DLP
	CHECKED	DP/RPK
	REVIEWED/APPROVED	RPK

ALL MEASUREMENTS ARE APPROXIMATE. THIS SHEET HAS BEEN MODIFIED FROM ANS-B.



LEGEND

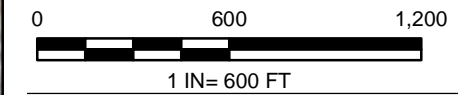
- ◆ AP-1 MONITORING WELL
- ◆ AP-2,3/4 MONITORING WELL
- ◆ UPGRADIENT WELL
- ▲ ASSESSMENT MONITORING WELLS
- ◆ PIEZOMETER
- ▲ DEWATERING WELL
- APPROXIMATE GROUNDWATER FLOW DIRECTION
- GROUNDWATER SURFACE CONTOUR (FT-NAVD)
- SURFACE WATER STREAM
- - - PERMIT BOUNDARY
- - - PROPERTY BOUNDARY
- EXISTING TOPOGRAPHY 5-FOOT CONTOUR
- EXISTING TOPOGRAPHY 1-FOOT CONTOUR

NOTES

1. ALL LOCATIONS AND BOUNDARIES ARE APPROXIMATE.
2. GROUNDWATER ELEVATION MEASUREMENTS OBTAINED OCTOBER 27, 2021 BY GOLDER ASSOCIATES.
3. GROUNDWATER ELEVATIONS DISPLAYED IN FEET REFERENCED TO NORTH AMERICAN VERTICAL DATUM (FT NAVD).
4. WELLS THAT CONTAIN A "D" DESIGNATION FOLLOWING THE NUMBER ARE DEEP WELLS AND ELEVATIONS ARE NOT USED FOR CONTOURING.

REFERENCE

1. AERIAL IMAGE DATED NOVEMBER 2019 FROM GOOGLE EARTH AND AUGUST 04, 2021 FROM COOPER, BARNETTE & PAGE, INC. (CBP).
2. COORDINATE SYSTEM: NAD 1983 STATE PLANE GEORGIA WEST (U.S. FEET).
3. MONITORING WELL/PIEZOMETER LOCATIONS AND ELEVATIONS SURVEYED BY METRO ENGINEERING AND SURVEYING COMPANY IN AUGUST 2020 WITH ADDITIONAL SURVEY PROVIDED IN JANUARY 2021 AND MAY 2021.



CLIENT
 GEORGIA POWER COMPANY
 PLANT MCDONOUGH



PROJECT
 2021 SEMI-ANNUAL GROUNDWATER MONITORING AND
 CORRECTIVE ACTION REPORT-ASH POND 1

TITLE
SITE POTENTIOMETRIC MAP – OCTOBER 27, 2021

CONSULTANT	DATE	REVISION
	YYYY-MM-DD	2021-10-29
	PREPARED	SEB
	DESIGN	SEB
	CHECKED	BAS
	REVIEWED/APPROVED	RPK

IF THIS MEASUREMENT DOES NOT MATCH WHAT IS SHOWN, THE SHEET HAS BEEN MODIFIED FROM ANSIB

APPENDIX A

Field Data Forms and Instrument Calibration Records

Low-Flow Test Report:

Test Date / Time: 9/16/2021 3:56:08 PM

Project: Low-Flow Test 36 (6)

Operator Name: Erin D Hondt

Location Name: DGWC-37 Well Diameter: 2 in Casing Type: PVC Screen Length: 10 ft Top of Screen: 33.08 ft Total Depth: 43.08 ft Initial Depth to Water: 14.45 ft	Pump Type: Dedicated Bladder Tubing Type: Polyethylene Pump Intake From TOC: 38.08 ft Estimated Total Volume Pumped: 14261.333 ml Flow Cell Volume: 90 ml Final Flow Rate: 280 ml/min Final Draw Down: -0.55 ft	Instrument Used: Aqua TROLL 400 Serial Number: 728638
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Test Notes:

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth To Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 10 %	+/- 10	+/- 10	+/- 0.3	
9/16/2021 3:56 PM	00:00	6.32 pH	19.31 °C	461.00 µS/cm	0.97 mg/L	49.30 NTU	87.5 mV	13.55 ft	280.00 ml/min
9/16/2021 4:01 PM	05:00	6.32 pH	19.14 °C	456.21 µS/cm	0.98 mg/L	26.10 NTU	73.1 mV	13.90 ft	280.00 ml/min
9/16/2021 4:06 PM	10:00	6.33 pH	19.05 °C	392.57 µS/cm	1.14 mg/L	15.60 NTU	70.6 mV	13.90 ft	280.00 ml/min
9/16/2021 4:11 PM	15:00	6.34 pH	18.96 °C	441.55 µS/cm	1.21 mg/L	9.00 NTU	85.6 mV	13.90 ft	280.00 ml/min
9/16/2021 4:17 PM	20:56	6.34 pH	18.87 °C	434.71 µS/cm	1.28 mg/L	9.90 NTU	71.0 mV	13.90 ft	280.00 ml/min
9/16/2021 4:22 PM	25:56	6.34 pH	18.76 °C	433.57 µS/cm	1.34 mg/L	8.10 NTU	83.1 mV	13.90 ft	280.00 ml/min
9/16/2021 4:27 PM	30:56	6.33 pH	18.78 °C	433.13 µS/cm	1.28 mg/L	5.60 NTU	82.1 mV	13.90 ft	280.00 ml/min
9/16/2021 4:32 PM	35:56	6.34 pH	18.79 °C	403.04 µS/cm	1.23 mg/L	2.90 NTU	80.6 mV	13.90 ft	280.00 ml/min
9/16/2021 4:37 PM	40:56	6.34 pH	18.84 °C	432.65 µS/cm	1.29 mg/L	3.20 NTU	63.2 mV	13.90 ft	280.00 ml/min
9/16/2021 4:42 PM	45:56	6.34 pH	18.82 °C	432.87 µS/cm	1.31 mg/L	2.20 NTU	78.7 mV	13.90 ft	280.00 ml/min
9/16/2021 4:47 PM	50:56	6.33 pH	18.86 °C	434.56 µS/cm	1.25 mg/L	2.40 NTU	78.1 mV	13.90 ft	280.00 ml/min

Samples

Sample ID:	Description:
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Low-Flow Test Report:

Test Date / Time: 9/15/2021 2:54:30 PM

Project: Plant McDonough (18)

Operator Name: D Fulton

Location Name: DGWC-38 Well Diameter: 2 in Casing Type: PVC Screen Length: 10 ft Top of Screen: 18.08 ft Total Depth: 28.08 ft	Pump Type: Dedicated Bladder Tubing Type: Poly Pump Intake From TOC: 23 ft Estimated Total Volume Pumped: 10 liter Flow Cell Volume: 90 ml Final Flow Rate: 225 ml/min	Instrument Used: Aqua TROLL 400 Serial Number: 850767
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Test Notes:

Weather Conditions:

Rain, 80 s

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth To Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 10 %	+/- 5	+/- 10	+/- 0.3	
9/15/2021 2:54 PM	00:00	6.05 pH	23.16 °C	338.62 µS/cm	5.00 mg/L	12.30 NTU	153.6 mV	6.14 ft	225.00 ml/min
9/15/2021 2:59 PM	05:00	6.02 pH	20.21 °C	649.57 µS/cm	0.94 mg/L	9.91 NTU	95.2 mV	6.16 ft	225.00 ml/min
9/15/2021 3:04 PM	10:00	6.03 pH	19.93 °C	675.98 µS/cm	0.69 mg/L	11.87 NTU	106.4 mV	6.16 ft	225.00 ml/min
9/15/2021 3:09 PM	15:00	6.03 pH	19.81 °C	692.66 µS/cm	0.32 mg/L	14.63 NTU	92.4 mV	6.16 ft	225.00 ml/min
9/15/2021 3:14 PM	20:00	6.04 pH	19.78 °C	695.16 µS/cm	0.23 mg/L	13.70 NTU	56.2 mV	6.16 ft	225.00 ml/min
9/15/2021 3:19 PM	25:00	6.04 pH	19.74 °C	693.59 µS/cm	0.20 mg/L	13.30 NTU	46.3 mV	6.16 ft	225.00 ml/min
9/15/2021 3:24 PM	30:00	6.05 pH	19.72 °C	692.51 µS/cm	0.17 mg/L	9.82 NTU	44.0 mV	6.15 ft	225.00 ml/min
9/15/2021 3:29 PM	35:00	6.06 pH	19.72 °C	690.15 µS/cm	0.16 mg/L	9.13 NTU	46.4 mV	6.15 ft	225.00 ml/min
9/15/2021 3:34 PM	40:00	6.07 pH	19.70 °C	691.00 µS/cm	0.15 mg/L	6.51 NTU	39.3 mV	6.15 ft	225.00 ml/min
9/15/2021 3:39 PM	45:00	6.07 pH	19.64 °C	691.91 µS/cm	0.15 mg/L	4.98 NTU	38.6 mV	6.15 ft	225.00 ml/min
9/15/2021 3:44 PM	50:00	6.08 pH	19.64 °C	690.15 µS/cm	0.14 mg/L	4.77 NTU	38.7 mV	6.15 ft	225.00 ml/min

Samples

Sample ID:	Description:
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Low-Flow Test Report:

Test Date / Time: 9/17/2021 10:00:43 AM

Project: Plant McDonough

Operator Name: Erin D Hondt

Location Name: DGWC-39 Well Diameter: 2 in Casing Type: PVC Screen Length: 10 ft Top of Screen: 14.62 ft Total Depth: 24.62 ft Initial Depth to Water: 6.85 ft	Pump Type: Dedicated Tubing Type: Polyethylene Pump Intake From TOC: 19 ft Estimated Total Volume Pumped: 3000 ml Flow Cell Volume: 90 ml Final Flow Rate: 120 ml/min Final Draw Down: 0.15 ft	Instrument Used: Aqua TROLL 400 Serial Number: 728638
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Test Notes:

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth To Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 10 %	+/- 10	+/- 10	+/- 0.3	
9/17/2021 10:00 AM	00:00	6.42 pH	21.90 °C	768.32 µS/cm	1.29 mg/L	12.80 NTU	-5.6 mV	6.85 ft	120.00 ml/min
9/17/2021 10:05 AM	05:00	6.46 pH	21.63 °C	766.43 µS/cm	0.99 mg/L	11.60 NTU	-17.5 mV	7.00 ft	120.00 ml/min
9/17/2021 10:10 AM	10:00	6.47 pH	21.44 °C	767.55 µS/cm	0.87 mg/L	11.10 NTU	-15.3 mV	7.00 ft	120.00 ml/min
9/17/2021 10:15 AM	15:00	6.48 pH	21.36 °C	767.68 µS/cm	0.79 mg/L	3.59 NTU	-16.9 mV	7.00 ft	120.00 ml/min
9/17/2021 10:20 AM	20:00	6.49 pH	21.30 °C	767.48 µS/cm	0.77 mg/L	2.88 NTU	-18.4 mV	7.00 ft	120.00 ml/min
9/17/2021 10:25 AM	25:00	6.49 pH	21.37 °C	767.17 µS/cm	0.78 mg/L	2.66 NTU	-18.6 mV	7.00 ft	120.00 ml/min

Samples

Sample ID:	Description:
------------	--------------

Low-Flow Test Report:

Test Date / Time: 9/14/2021 4:03:28 PM

Project: Plant McDonough (7)

Operator Name: E. Dhondt

Location Name: DGWC-40 Well Diameter: 2 in Casing Type: PVC Screen Length: 10 ft Top of Screen: 28.4 ft Total Depth: 38.4 ft Initial Depth to Water: 17.46 ft	Pump Type: Dedicated bladder Tubing Type: Polyethylene Pump Intake From TOC: 33.4 ft Estimated Total Volume Pumped: 5600 ml Flow Cell Volume: 90 ml Final Flow Rate: 280 ml/min Final Draw Down: 0.14 ft	Instrument Used: Aqua TROLL 400 Serial Number: 850724
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Test Notes:

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth To Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 10 %	+/- 5	+/- 10	+/- 0.3	
9/14/2021 4:03 PM	00:00	4.84 pH	22.80 °C	501.13 µS/cm	2.31 mg/L	18.40 NTU	83.7 mV	17.46 ft	280.00 ml/min
9/14/2021 4:08 PM	05:00	4.73 pH	21.85 °C	502.16 µS/cm	2.39 mg/L	13.27 NTU	117.3 mV	17.60 ft	280.00 ml/min
9/14/2021 4:13 PM	10:00	4.68 pH	21.61 °C	519.54 µS/cm	2.46 mg/L	9.64 NTU	129.0 mV	17.60 ft	280.00 ml/min
9/14/2021 4:18 PM	15:00	4.67 pH	21.35 °C	514.84 µS/cm	2.46 mg/L	5.16 NTU	135.2 mV	17.60 ft	280.00 ml/min
9/14/2021 4:23 PM	20:00	4.67 pH	21.18 °C	511.89 µS/cm	2.46 mg/L	1.85 NTU	220.3 mV	17.60 ft	280.00 ml/min

Samples

Sample ID:	Description:
DGWC-40	FB-4

Low-Flow Test Report:

Test Date / Time: 9/16/2021 1:32:30 PM

Project: Plant McDonough

Operator Name: Erin D Hondt

Location Name: DGWC- 67 Well Diameter: 2 in Casing Type: PVC Screen Length: 10 ft Top of Screen: 45.5 ft Total Depth: 55.5 ft Initial Depth to Water: 9.85 ft	Pump Type: Peristaltic Tubing Type: Polyethylene Pump Intake From TOC: 50.5 ft Estimated Total Volume Pumped: 17530.33 ml Flow Cell Volume: 90 ml Final Flow Rate: 220 ml/min Final Draw Down: 1 ft	Instrument Used: Aqua TROLL 400 Serial Number: 728638
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Test Notes:

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth To Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 10 %	+/- 10	+/- 10	+/- 0.3	
9/16/2021 1:32 PM	00:00	6.42 pH	19.05 °C	409.17 µS/cm	4.98 mg/L	12.40 NTU	144.9 mV	9.85 ft	220.00 ml/min
9/16/2021 1:38 PM	06:05	6.43 pH	18.87 °C	408.96 µS/cm	4.77 mg/L	2.70 NTU	121.1 mV	10.80 ft	220.00 ml/min
9/16/2021 1:43 PM	11:05	6.38 pH	18.96 °C	410.61 µS/cm	2.82 mg/L	1.10 NTU	124.2 mV	10.85 ft	220.00 ml/min
9/16/2021 1:48 PM	16:05	6.33 pH	18.92 °C	410.84 µS/cm	1.49 mg/L	0.90 NTU	114.0 mV	10.85 ft	220.00 ml/min
9/16/2021 1:53 PM	21:05	6.28 pH	18.83 °C	420.18 µS/cm	0.88 mg/L	1.70 NTU	105.3 mV	10.85 ft	220.00 ml/min
9/16/2021 1:58 PM	26:05	6.23 pH	18.78 °C	423.93 µS/cm	0.45 mg/L	1.90 NTU	102.4 mV	10.85 ft	220.00 ml/min
9/16/2021 2:03 PM	30:45	6.22 pH	18.82 °C	422.11 µS/cm	0.31 mg/L	1.00 NTU	87.7 mV	10.85 ft	220.00 ml/min
9/16/2021 2:08 PM	35:45	6.22 pH	18.80 °C	425.34 µS/cm	0.22 mg/L	1.30 NTU	78.8 mV	10.85 ft	220.00 ml/min
9/16/2021 2:13 PM	40:45	6.22 pH	18.76 °C	425.59 µS/cm	0.17 mg/L	0.80 NTU	75.6 mV	10.85 ft	220.00 ml/min
9/16/2021 2:16 PM	44:09	6.22 pH	18.78 °C	422.70 µS/cm	0.14 mg/L	0.60 NTU	77.8 mV	10.85 ft	220.00 ml/min
9/16/2021 2:21 PM	49:09	6.19 pH	18.91 °C	419.76 µS/cm	0.11 mg/L	1.20 NTU	102.0 mV	10.85 ft	220.00 ml/min
9/16/2021 2:26 PM	54:09	6.21 pH	19.32 °C	424.08 µS/cm	0.10 mg/L	0.90 NTU	73.0 mV	10.85 ft	220.00 ml/min
9/16/2021 2:27 PM	54:41	6.21 pH	19.38 °C	421.54 µS/cm	0.10 mg/L	0.90 NTU	69.0 mV	10.85 ft	220.00 ml/min
9/16/2021 2:32 PM	59:41	6.21 pH	19.50 °C	420.33 µS/cm	0.08 mg/L	1.30 NTU	68.8 mV	10.85 ft	220.00 ml/min
9/16/2021 2:37 PM	01:04:41	6.21 pH	19.14 °C	419.50 µS/cm	0.07 mg/L	1.10 NTU	68.3 mV	10.85 ft	220.00 ml/min
9/16/2021 2:42 PM	01:09:41	6.20 pH	19.04 °C	419.10 µS/cm	0.06 mg/L	1.90 NTU	84.6 mV	10.85 ft	220.00 ml/min

9/16/2021 2:47 PM	01:14:41	6.20 pH	19.08 °C	418.36 µS/cm	0.06 mg/L	1.80 NTU	85.3 mV	10.85 ft	220.00 ml/min
9/16/2021 2:52 PM	01:19:41	6.20 pH	19.16 °C	417.25 µS/cm	0.05 mg/L	3.00 NTU	67.5 mV	10.85 ft	220.00 ml/min

Samples

Sample ID:	Description:
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Low-Flow Test Report:

Test Date / Time: 9/16/2021 1:26:02 PM

Project: Plant McDonough (21)

Operator Name: D Fulton

Location Name: DGWC-68A Well Diameter: 2 in Casing Type: PVC Screen Length: 10 ft Top of Screen: 19.79 ft Total Depth: 29.79 ft Initial Depth to Water: 3.68 ft	Pump Type: Peristaltic Tubing Type: Polyethylene Pump Intake From TOC: 24 ft Estimated Total Volume Pumped: 8.75 liter Flow Cell Volume: 90 ml Final Flow Rate: 175 ml/min Final Draw Down: 0.24 ft	Instrument Used: Aqua TROLL 400 Serial Number: 850767
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Test Notes:

Weather Conditions:

Rain, 80 s

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth To Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 10 %	+/- 5	+/- 10	+/- 0.3	
9/16/2021 1:26 PM	00:00	6.77 pH	23.43 °C	482.46 µS/cm	4.51 mg/L	84.30 NTU	-22.4 mV	3.80 ft	175.00 ml/min
9/16/2021 1:31 PM	05:00	6.82 pH	19.88 °C	506.05 µS/cm	0.17 mg/L	60.80 NTU	-44.6 mV	3.90 ft	175.00 ml/min
9/16/2021 1:36 PM	10:00	6.80 pH	19.48 °C	500.01 µS/cm	0.12 mg/L	32.70 NTU	-68.8 mV	3.92 ft	175.00 ml/min
9/16/2021 1:41 PM	15:00	6.80 pH	19.45 °C	497.99 µS/cm	0.09 mg/L	22.20 NTU	-35.7 mV	3.92 ft	175.00 ml/min
9/16/2021 1:46 PM	20:00	6.79 pH	19.54 °C	494.30 µS/cm	0.08 mg/L	16.10 NTU	-33.0 mV	3.92 ft	175.00 ml/min
9/16/2021 1:51 PM	25:00	6.79 pH	19.50 °C	492.41 µS/cm	0.07 mg/L	12.30 NTU	-31.5 mV	3.92 ft	175.00 ml/min
9/16/2021 1:56 PM	30:00	6.79 pH	19.48 °C	491.36 µS/cm	0.07 mg/L	9.20 NTU	-30.3 mV	3.92 ft	175.00 ml/min
9/16/2021 2:01 PM	35:00	6.79 pH	19.50 °C	491.70 µS/cm	0.07 mg/L	7.77 NTU	-58.8 mV	3.92 ft	175.00 ml/min
9/16/2021 2:06 PM	40:00	6.78 pH	19.52 °C	491.01 µS/cm	0.06 mg/L	7.51 NTU	-29.4 mV	3.92 ft	175.00 ml/min
9/16/2021 2:11 PM	45:00	6.78 pH	19.47 °C	491.05 µS/cm	0.06 mg/L	6.33 NTU	-29.0 mV	3.92 ft	175.00 ml/min
9/16/2021 2:16 PM	50:00	6.79 pH	19.41 °C	490.46 µS/cm	0.05 mg/L	4.60 NTU	-28.3 mV	3.92 ft	175.00 ml/min

Samples

Sample ID:	Description:
DGWC-68A	

Created using VuSitu from In-Situ, Inc.

Low-Flow Test Report:

Test Date / Time: 9/16/2021 10:10:43 AM

Project: Plant McDonough (19)

Operator Name: D Fulton

Location Name: DWGC-69 Well Diameter: 2 in Casing Type: PVC Screen Length: 10 ft Top of Screen: 14.06 ft Total Depth: 24.06 ft Initial Depth to Water: 5.7 ft	Pump Type: Peristaltic Tubing Type: Polyethylene Pump Intake From TOC: 19 ft Estimated Total Volume Pumped: 4.50 liter Flow Cell Volume: 90 ml Final Flow Rate: 175 ml/min Final Draw Down: 0.65 ft	Instrument Used: Aqua TROLL 400 Serial Number: 850767
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Test Notes:

Weather Conditions:

Rain, 70 s

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth To Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 10 %	+/- 5	+/- 10	+/- 0.3	
9/16/2021 10:10 AM	00:00	6.24 pH	21.44 °C	173.63 µS/cm	5.61 mg/L	7.92 NTU	157.0 mV	5.92 ft	200.00 ml/min
9/16/2021 10:15 AM	05:00	6.15 pH	20.31 °C	175.62 µS/cm	2.01 mg/L	6.92 NTU	105.9 mV	6.30 ft	175.00 ml/min
9/16/2021 10:20 AM	10:00	6.14 pH	20.17 °C	175.58 µS/cm	1.95 mg/L	2.22 NTU	83.9 mV	6.35 ft	175.00 ml/min
9/16/2021 10:25 AM	15:00	6.15 pH	20.05 °C	175.33 µS/cm	1.91 mg/L	2.91 NTU	75.6 mV	6.35 ft	175.00 ml/min
9/16/2021 10:30 AM	20:00	6.16 pH	19.99 °C	176.03 µS/cm	1.91 mg/L	3.64 NTU	71.9 mV	6.35 ft	175.00 ml/min
9/16/2021 10:35 AM	25:00	6.16 pH	19.97 °C	175.58 µS/cm	1.93 mg/L	2.94 NTU	69.8 mV	6.35 ft	175.00 ml/min

Samples

Sample ID:	Description:
DWGC-69	

Low-Flow Test Report:

Test Date / Time: 10/27/2021 2:55:12 PM

Project: Plant McDonough

Operator Name: Jude waguespack

Location Name: DGWC-68A Well Diameter: 2 in Casing Type: PVC Screen Length: 10 ft Top of Screen: 19.79 ft Total Depth: 29.79 ft Initial Depth to Water: 10.36 ft	Pump Type: Peristaltic Tubing Type: Polyethylene Pump Intake From TOC: 24 ft Estimated Total Volume Pumped: 3750 ml Flow Cell Volume: 90 ml Final Flow Rate: 150 ml/min Final Draw Down: 0.23 ft	Instrument Used: Aqua TROLL 400 Serial Number: 850762
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Test Notes:

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth To Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 10 %	+/- 10	+/- 10	+/- 0.3	
10/27/2021 2:55 PM	00:00	6.54 pH	23.05 °C	409.56 µS/cm	0.78 mg/L	1.10 NTU	66.3 mV	10.36 ft	150.00 ml/min
10/27/2021 3:00 PM	05:00	6.55 pH	20.73 °C	443.81 µS/cm	0.32 mg/L	0.82 NTU	24.8 mV	10.59 ft	150.00 ml/min
10/27/2021 3:05 PM	10:00	6.56 pH	20.28 °C	445.39 µS/cm	0.26 mg/L	2.22 NTU	18.4 mV	10.59 ft	150.00 ml/min
10/27/2021 3:10 PM	15:00	6.56 pH	20.10 °C	448.51 µS/cm	0.24 mg/L	0.97 NTU	19.2 mV	10.59 ft	150.00 ml/min
10/27/2021 3:15 PM	20:00	6.56 pH	19.93 °C	446.68 µS/cm	0.22 mg/L	1.46 NTU	17.7 mV	10.59 ft	150.00 ml/min
10/27/2021 3:20 PM	25:00	6.56 pH	19.70 °C	448.69 µS/cm	0.21 mg/L	0.68 NTU	16.3 mV	10.59 ft	150.00 ml/min

Samples

Sample ID:	Description:
DGWC-68A	

Low-Flow Test Report:

Test Date / Time: 9/9/2021 12:28:47 PM

Project: Plant McDonough

Operator Name: Jude Waguespack

Location Name: DGWA-53 Well Diameter: 2 in Casing Type: PVC Screen Length: 10 ft Top of Screen: 26.84 ft Total Depth: 36.84 ft Initial Depth to Water: 13.75 ft	Pump Type: Peristaltic Tubing Type: Polyethylene Pump Intake From TOC: 31 ft Estimated Total Volume Pumped: 22.71 L Flow Cell Volume: 90 ml Final Flow Rate: 100 ml/min Final Draw Down: 0.85 ft	Instrument Used: Aqua TROLL 400 Serial Number: 843593
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Test Notes:

DGWA-53 purged dry. A sample was collected 24-hours later after the well had recharged.

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth To Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 10 %	+/- 5	+/- 10	+/- 0.3	
9/9/2021 12:28 PM	00:00	6.41 pH	24.27 °C	197.99 µS/cm	1.50 mg/L	4.50 NTU	14.7 mV	14.60 ft	100.00 ml/min
9/9/2021 12:29 PM	01:00	6.41 pH	23.38 °C	198.00 µS/cm	1.41 mg/L	4.50 NTU	16.7 mV	14.60 ft	100.00 ml/min
9/9/2021 12:30 PM	02:00	6.40 pH	22.33 °C	200.14 µS/cm	1.37 mg/L	4.50 NTU	16.1 mV	14.60 ft	100.00 ml/min

Samples

Sample ID:	Description:
DGWA-53	

Low-Flow Test Report:

Test Date / Time: 9/9/2021 2:36:19 PM

Project: Plant McDonough (4)

Operator Name: D Fulton

Location Name: DGWA-70A Well Diameter: 2 in Casing Type: PVC Screen Length: 10 ft Top of Screen: 52.41 ft Total Depth: 62.41 ft Initial Depth to Water: 40.75 ft	Pump Type: Dedicated Tubing Type: Polyethylene Pump Intake From TOC: 57 ft Estimated Total Volume Pumped: 6.25 liter Flow Cell Volume: 90 ml Final Flow Rate: 300 ml/min Final Draw Down: 0.82 ft	Instrument Used: Aqua TROLL 400 Serial Number: 850767
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Test Notes:

Weather Conditions:

Clear, 84

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth To Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 10 %	+/- 5	+/- 10	+/- 0.3	
9/9/2021 2:36 PM	00:00	5.53 pH	21.22 °C	62.61 µS/cm	5.67 mg/L	1.24 NTU	153.9 mV	41.53 ft	350.00 ml/min
9/9/2021 2:41 PM	05:00	5.49 pH	18.52 °C	63.87 µS/cm	4.83 mg/L	0.36 NTU	98.2 mV	41.55 ft	300.00 ml/min
9/9/2021 2:46 PM	10:00	5.49 pH	18.48 °C	66.22 µS/cm	4.85 mg/L	0.54 NTU	91.9 mV	41.57 ft	300.00 ml/min
9/9/2021 2:51 PM	15:00	5.50 pH	18.21 °C	67.21 µS/cm	4.88 mg/L	0.62 NTU	90.6 mV	41.57 ft	300.00 ml/min
9/9/2021 2:56 PM	20:00	5.50 pH	18.30 °C	67.29 µS/cm	4.91 mg/L	0.65 NTU	90.7 mV	41.57 ft	300.00 ml/min

Samples

Sample ID:	Description:
DGWA-70A	

Low-Flow Test Report:

Test Date / Time: 9/8/2021 12:55:50 PM

Project: Plant McDonough (2)

Operator Name: Erik Rheams

Location Name: DGWA-71 Well Diameter: 2 in Casing Type: PVC Screen Length: 10 ft Top of Screen: 37.79 ft Total Depth: 47.79 ft Initial Depth to Water: 27.76 ft	Pump Type: Dedicated Tubing Type: Polyethylene Pump Intake From TOC: 42.79 ft Estimated Total Volume Pumped: 22990 ml Flow Cell Volume: 90 ml Final Flow Rate: 220 ml/min Final Draw Down: 0.46 ft	Instrument Used: Aqua TROLL 400 Serial Number: 850751
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Test Notes:

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth To Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 10 %	+/- 5	+/- 10	+/- 0.3	
9/8/2021 12:55 PM	00:00	7.67 pH	32.77 °C	0.00 µS/cm	6.32 mg/L	2.06 NTU	-47.1 mV	27.76 ft	220.00 ml/min
9/8/2021 1:00 PM	05:00	6.25 pH	24.97 °C	0.00 µS/cm	6.91 mg/L	2.17 NTU	-632.9 mV	28.22 ft	220.00 ml/min
9/8/2021 1:05 PM	10:00	6.08 pH	22.47 °C	0.00 µS/cm	6.37 mg/L	2.27 NTU	-283.1 mV	28.22 ft	220.00 ml/min
9/8/2021 1:10 PM	15:00	6.13 pH	21.45 °C	0.00 µS/cm	6.51 mg/L	1.45 NTU	93.6 mV	28.22 ft	220.00 ml/min
9/8/2021 1:15 PM	20:00	5.81 pH	20.07 °C	81.38 µS/cm	3.40 mg/L	1.62 NTU	192.2 mV	28.22 ft	220.00 ml/min
9/8/2021 1:20 PM	25:00	5.75 pH	19.58 °C	78.19 µS/cm	3.00 mg/L	2.74 NTU	176.0 mV	28.22 ft	220.00 ml/min
9/8/2021 1:25 PM	30:00	5.74 pH	19.44 °C	76.03 µS/cm	2.01 mg/L	3.54 NTU	163.5 mV	28.22 ft	220.00 ml/min
9/8/2021 1:45 PM	49:30	5.74 pH	19.51 °C	73.59 µS/cm	3.91 mg/L	2.32 NTU	131.9 mV	28.22 ft	220.00 ml/min
9/8/2021 1:50 PM	54:30	5.73 pH	19.54 °C	68.82 µS/cm	5.72 mg/L	1.99 NTU	146.8 mV	28.22 ft	220.00 ml/min
9/8/2021 1:55 PM	59:30	5.74 pH	19.63 °C	76.32 µS/cm	3.70 mg/L	3.55 NTU	140.8 mV	28.22 ft	220.00 ml/min
9/8/2021 2:00 PM	01:04:30	5.74 pH	19.46 °C	66.12 µS/cm	2.02 mg/L	4.23 NTU	137.9 mV	28.22 ft	220.00 ml/min
9/8/2021 2:05 PM	01:09:30	5.75 pH	20.13 °C	79.94 µS/cm	1.74 mg/L	4.01 NTU	132.0 mV	28.22 ft	220.00 ml/min
9/8/2021 2:10 PM	01:14:30	5.75 pH	20.12 °C	80.41 µS/cm	3.16 mg/L	3.28 NTU	130.5 mV	28.22 ft	220.00 ml/min
9/8/2021 2:15 PM	01:19:30	5.74 pH	20.39 °C	79.37 µS/cm	2.43 mg/L	3.01 NTU	127.3 mV	28.22 ft	220.00 ml/min
9/8/2021 2:20 PM	01:24:30	5.76 pH	20.39 °C	76.16 µS/cm	1.60 mg/L	2.81 NTU	124.9 mV	28.22 ft	220.00 ml/min

9/8/2021 2:25 PM	01:29:30	5.76 pH	20.77 °C	78.64 µS/cm	1.70 mg/L	3.27 NTU	127.3 mV	28.22 ft	220.00 ml/min
9/8/2021 2:30 PM	01:34:30	5.75 pH	20.84 °C	78.13 µS/cm	1.42 mg/L	4.50 NTU	160.1 mV	28.22 ft	220.00 ml/min
9/8/2021 2:35 PM	01:39:30	5.76 pH	20.71 °C	75.78 µS/cm	1.35 mg/L	2.70 NTU	131.9 mV	28.22 ft	220.00 ml/min
9/8/2021 2:40 PM	01:44:30	5.76 pH	20.69 °C	77.38 µS/cm	1.36 mg/L	1.88 NTU	128.8 mV	28.22 ft	220.00 ml/min

Samples

Sample ID:	Description:
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Low-Flow Test Report:

Test Date / Time: 9/9/2021 2:26:06 PM

Project: Plant McDonough

Operator Name: Jude Waguespack

Location Name: B-62 Well Diameter: 2 in Casing Type: PVC Screen Length: 10 ft Top of Screen: 29.62 ft Total Depth: 39.62 ft Initial Depth to Water: 11.95 ft	Pump Type: Peristaltic Tubing Type: Polyethylene Pump Intake From TOC: 34 ft Estimated Total Volume Pumped: 20000 ml Flow Cell Volume: 90 ml Final Flow Rate: 250 ml/min Final Draw Down: 0.45 ft	Instrument Used: Aqua TROLL 400 Serial Number: 843593
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Test Notes:

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth To Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 10 %	+/- 5	+/- 10	+/- 0.3	
9/9/2021 2:26 PM	00:00	6.40 pH	29.86 °C	261.98 µS/cm	4.59 mg/L		47.2 mV	11.95 ft	250.00 ml/min
9/9/2021 2:31 PM	05:00	6.35 pH	20.27 °C	296.54 µS/cm	0.41 mg/L	38.80 NTU	13.7 mV	12.38 ft	250.00 ml/min
9/9/2021 2:36 PM	10:00	6.37 pH	19.77 °C	286.67 µS/cm	0.31 mg/L	35.50 NTU	3.9 mV	12.40 ft	250.00 ml/min
9/9/2021 2:41 PM	15:00	6.27 pH	19.63 °C	278.05 µS/cm	0.26 mg/L	38.00 NTU	3.9 mV	12.40 ft	250.00 ml/min
9/9/2021 2:46 PM	20:00	6.32 pH	19.59 °C	270.42 µS/cm	0.19 mg/L	13.00 NTU	1.5 mV	12.40 ft	250.00 ml/min
9/9/2021 2:51 PM	25:00	6.33 pH	19.59 °C	274.22 µS/cm	0.24 mg/L	17.00 NTU	11.6 mV	12.40 ft	250.00 ml/min
9/9/2021 2:56 PM	30:00	6.32 pH	19.55 °C	268.88 µS/cm	0.21 mg/L	12.20 NTU	4.3 mV	12.40 ft	250.00 ml/min
9/9/2021 3:01 PM	35:00	6.29 pH	19.53 °C	268.39 µS/cm	0.20 mg/L	15.20 NTU	6.0 mV	12.40 ft	250.00 ml/min
9/9/2021 3:06 PM	40:00	6.30 pH	19.72 °C	268.63 µS/cm	0.20 mg/L	15.10 NTU	13.7 mV	12.40 ft	250.00 ml/min
9/9/2021 3:11 PM	45:00	6.25 pH	20.08 °C	269.64 µS/cm	0.22 mg/L	13.20 NTU	8.7 mV	12.40 ft	250.00 ml/min
9/9/2021 3:16 PM	50:00	6.27 pH	20.70 °C	271.92 µS/cm	0.30 mg/L	19.10 NTU	11.8 mV	12.40 ft	250.00 ml/min
9/9/2021 3:21 PM	55:00	6.23 pH	20.95 °C	269.42 µS/cm	0.32 mg/L	20.50 NTU	18.7 mV	12.40 ft	250.00 ml/min
9/9/2021 3:26 PM	01:00:00	6.29 pH	19.95 °C	269.54 µS/cm	0.31 mg/L	19.50 NTU	17.3 mV	12.40 ft	250.00 ml/min
9/9/2021 3:31 PM	01:05:00	6.26 pH	19.81 °C	269.39 µS/cm	0.24 mg/L	12.70 NTU	16.6 mV	12.40 ft	250.00 ml/min
9/9/2021 3:36 PM	01:10:00	6.29 pH	19.86 °C	269.42 µS/cm	0.21 mg/L	9.60 NTU	15.2 mV	12.40 ft	250.00 ml/min

9/9/2021 3:41 PM	01:15:00	6.29 pH	19.79 °C	268.73 µS/cm	0.18 mg/L	6.66 NTU	14.7 mV	12.40 ft	250.00 ml/min
9/9/2021 3:46 PM	01:20:00	6.31 pH	19.81 °C	268.58 µS/cm	0.18 mg/L	3.00 NTU	14.5 mV	12.40 ft	250.00 ml/min

Samples

Sample ID:	Description:
B-62	

Low-Flow Test Report:

Test Date / Time: 9/13/2021 3:54:15 PM

Project: Plant McDonough (15)

Operator Name: Erik Rheams

Location Name: B-100 Well Diameter: 2 in Casing Type: PVC Screen Length: 10 ft Top of Screen: 37.93 ft Total Depth: 47.93 ft Initial Depth to Water: 34.88 ft	Pump Type: bladder Tubing Type: Polyethylene Pump Intake From TOC: 42 ft Estimated Total Volume Pumped: 9600 ml Flow Cell Volume: 90 ml Final Flow Rate: 160 ml/min Final Draw Down: 0.12 ft	Instrument Used: Aqua TROLL 400 Serial Number: 850751
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Test Notes:

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth To Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 10 %	+/- 5	+/- 10	+/- 0.3	
9/13/2021 3:54 PM	00:00	5.15 pH	33.05 °C	729.00 µS/cm	2.59 mg/L	78.30 NTU	42.4 mV	34.88 ft	160.00 ml/min
9/13/2021 3:59 PM	05:00	5.18 pH	25.97 °C	785.56 µS/cm	0.61 mg/L	48.00 NTU	34.9 mV	34.99 ft	160.00 ml/min
9/13/2021 4:04 PM	10:00	5.20 pH	25.35 °C	781.72 µS/cm	0.45 mg/L	25.10 NTU	32.8 mV	35.03 ft	160.00 ml/min
9/13/2021 4:09 PM	15:00	5.22 pH	24.97 °C	776.70 µS/cm	0.38 mg/L	20.00 NTU	32.0 mV	35.00 ft	160.00 ml/min
9/13/2021 4:14 PM	20:00	5.23 pH	24.43 °C	777.53 µS/cm	0.33 mg/L	17.40 NTU	31.1 mV	35.00 ft	160.00 ml/min
9/13/2021 4:19 PM	25:00	5.23 pH	24.49 °C	773.98 µS/cm	0.30 mg/L	17.00 NTU	30.3 mV	35.00 ft	160.00 ml/min
9/13/2021 4:24 PM	30:00	5.23 pH	24.79 °C	771.20 µS/cm	0.27 mg/L	11.90 NTU	29.6 mV	35.00 ft	160.00 ml/min
9/13/2021 4:29 PM	35:00	5.23 pH	25.08 °C	764.96 µS/cm	0.26 mg/L	12.50 NTU	28.9 mV	35.00 ft	160.00 ml/min
9/13/2021 4:34 PM	40:00	5.23 pH	25.82 °C	762.55 µS/cm	0.28 mg/L	11.70 NTU	27.9 mV	35.00 ft	160.00 ml/min
9/13/2021 4:39 PM	45:00	5.22 pH	26.07 °C	751.76 µS/cm	0.28 mg/L	14.20 NTU	27.6 mV	35.00 ft	160.00 ml/min
9/13/2021 4:44 PM	50:00	5.25 pH	23.30 °C	752.36 µS/cm	0.22 mg/L	10.59 NTU	29.5 mV	35.00 ft	160.00 ml/min
9/13/2021 4:49 PM	55:00	5.26 pH	22.98 °C	756.66 µS/cm	0.16 mg/L	5.34 NTU	29.6 mV	35.00 ft	160.00 ml/min
9/13/2021 4:54 PM	01:00:00	5.27 pH	23.12 °C	750.79 µS/cm	0.13 mg/L	4.33 NTU	29.3 mV	35.00 ft	160.00 ml/min

Samples

Sample ID:	Description:
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Created using VuSitu from In-Situ, Inc.

Low-Flow Test Report:

Test Date / Time: 9/15/2021 1:43:57 PM

Project: Plant McDonough

Operator Name: Erin D Hondt

Location Name: B-105D Well Diameter: 2 in Casing Type: PVC Screen Length: 10 ft Top of Screen: 60 ft Total Depth: 70 ft Initial Depth to Water: 17.29 ft	Pump Type: Bladder Tubing Type: Polyethylene Pump Intake From TOC: 65 ft Estimated Total Volume Pumped: 18634 ml Flow Cell Volume: 90 ml Final Flow Rate: 240 ml/min Final Draw Down: 1.71 ft	Instrument Used: Aqua TROLL 400 Serial Number: 728638
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Test Notes:

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth To Water	Flow
		+/- 0.1	+/- 0.5	+/- 3 %	+/- 0.3	+/- 10	+/- 10	+/- 5	
9/15/2021 1:43 PM	00:00	6.80 pH	21.01 °C	685.88 µS/cm	7.89 mg/L	14.10 NTU	-18.1 mV	17.29 ft	280.00 ml/min
9/15/2021 1:48 PM	05:00	6.86 pH	20.47 °C	665.27 µS/cm	7.70 mg/L	11.00 NTU	-20.8 mV	19.10 ft	280.00 ml/min
9/15/2021 1:51 PM	07:06	6.82 pH	20.44 °C	664.74 µS/cm	6.16 mg/L	8.49 NTU	-12.0 mV	19.10 ft	280.00 ml/min
9/15/2021 1:56 PM	12:06	6.72 pH	20.73 °C	658.23 µS/cm	4.45 mg/L	12.50 NTU	-6.4 mV	19.05 ft	280.00 ml/min
9/15/2021 2:01 PM	17:06	6.94 pH	22.04 °C	0.17 µS/cm	8.31 mg/L	11.80 NTU	21.1 mV	18.90 ft	280.00 ml/min
9/15/2021 2:06 PM	22:06	7.01 pH	23.49 °C	0.11 µS/cm	8.34 mg/L	13.20 NTU	21.1 mV	18.75 ft	280.00 ml/min
9/15/2021 2:12 PM	28:21	6.69 pH	21.23 °C	630.22 µS/cm	9.19 mg/L	12.80 NTU	-13.2 mV	18.60 ft	240.00 ml/min
9/15/2021 2:17 PM	33:21	6.78 pH	21.04 °C	0.40 µS/cm	8.33 mg/L	7.10 NTU	20.7 mV	18.90 ft	240.00 ml/min
9/15/2021 2:21 PM	37:55	6.58 pH	20.98 °C	656.67 µS/cm	7.29 mg/L	6.07 NTU	-9.0 mV	19.00 ft	240.00 ml/min
9/15/2021 2:26 PM	42:55	6.52 pH	20.66 °C	642.86 µS/cm	6.47 mg/L	5.91 NTU	-14.8 mV	19.00 ft	240.00 ml/min
9/15/2021 2:31 PM	47:55	6.47 pH	20.65 °C	636.01 µS/cm	6.02 mg/L	3.77 NTU	-15.0 mV	19.00 ft	240.00 ml/min
9/15/2021 2:36 PM	52:55	6.45 pH	20.60 °C	637.62 µS/cm	5.94 mg/L	3.61 NTU	-14.8 mV	19.00 ft	240.00 ml/min
9/15/2021 2:41 PM	57:55	6.42 pH	20.52 °C	634.47 µS/cm	5.58 mg/L	2.92 NTU	-15.0 mV	19.00 ft	240.00 ml/min
9/15/2021 2:46 PM	01:02:55	6.40 pH	20.49 °C	629.87 µS/cm	5.34 mg/L	2.81 NTU	-13.7 mV	19.00 ft	240.00 ml/min
9/15/2021 2:51 PM	01:07:55	6.38 pH	20.47 °C	635.29 µS/cm	5.24 mg/L	2.44 NTU	-14.7 mV	19.00 ft	240.00 ml/min
9/15/2021 2:56 PM	01:12:55	6.38 pH	20.42 °C	634.64 µS/cm	5.26 mg/L	2.46 NTU	-9.2 mV	19.00 ft	240.00 ml/min

Samples

Sample ID:	Description:
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Created using VuSitu from In-Situ, Inc.

Low-Flow Test Report:

Test Date / Time: 9/16/2021 11:48:28 AM

Project: Plant McDonough (20)

Operator Name: D Fulton

Location Name: B-112D Well Diameter: 2 in Casing Type: PVC Screen Length: 10 ft Top of Screen: 45 ft Total Depth: 55 ft Initial Depth to Water: 8.27 ft	Pump Type: Peristaltic Tubing Type: Polyethylene Pump Intake From TOC: 50 ft Estimated Total Volume Pumped: 5 liter Flow Cell Volume: 90 ml Final Flow Rate: 200 ml/min Final Draw Down: -0.85 ft	Instrument Used: Aqua TROLL 400 Serial Number: 850767
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Test Notes:

Weather Conditions:

Rain,80 s

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth To Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 10 %	+/- 5	+/- 10	+/- 0.3	
9/16/2021 11:48 AM	00:00	9.24 pH	23.07 °C	212.47 µS/cm	4.02 mg/L	8.75 NTU	54.2 mV	7.40 ft	200.00 ml/min
9/16/2021 11:53 AM	05:00	6.74 pH	20.26 °C	279.58 µS/cm	0.33 mg/L	7.06 NTU	12.1 mV	7.40 ft	200.00 ml/min
9/16/2021 11:58 AM	10:00	6.75 pH	19.91 °C	280.92 µS/cm	0.23 mg/L	5.19 NTU	-44.9 mV	7.42 ft	200.00 ml/min
9/16/2021 12:03 PM	15:00	6.73 pH	19.77 °C	280.65 µS/cm	0.19 mg/L	3.70 NTU	-6.3 mV	7.42 ft	200.00 ml/min
9/16/2021 12:08 PM	20:00	6.73 pH	19.77 °C	282.73 µS/cm	0.15 mg/L	4.86 NTU	6.6 mV	7.42 ft	200.00 ml/min
9/16/2021 12:13 PM	25:00	6.74 pH	19.87 °C	289.94 µS/cm	0.14 mg/L	3.77 NTU	13.3 mV	7.42 ft	200.00 ml/min

Samples

Sample ID:	Description:
B-112D	

Low-Flow Test Report:

Test Date / Time: 9/17/2021 12:48:15 PM

Project: Plant McDonough

Operator Name: Erin D Hondt

Location Name: B-113D Well Diameter: 2 in Casing Type: PVC Screen Length: 10 ft Top of Screen: 70 ft Total Depth: 80 ft Initial Depth to Water: 2.13 ft	Pump Type: Peristaltic Tubing Type: Polyethylene Pump Intake From TOC: 75 ft Estimated Total Volume Pumped: 17588 ml Flow Cell Volume: 90 ml Final Flow Rate: 100 ml/min Final Draw Down: 19.77 ft	Instrument Used: Aqua TROLL 400 Serial Number: 728638
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Test Notes:

Complete well evacuation 9/16

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth To Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 10 %	+/- 10	+/- 10	+/- 0.3	
9/17/2021 12:48 PM	00:00	8.10 pH	20.41 °C	523.50 µS/cm	0.98 mg/L	5.27 NTU	58.9 mV	2.13 ft	200.00 ml/min
9/17/2021 12:53 PM	05:00	8.12 pH	20.34 °C	532.68 µS/cm	1.00 mg/L	4.72 NTU	62.7 mV	5.20 ft	200.00 ml/min
9/17/2021 12:58 PM	10:00	8.12 pH	19.99 °C	529.42 µS/cm	0.93 mg/L	4.86 NTU	61.6 mV	6.50 ft	160.00 ml/min
9/17/2021 1:03 PM	15:00	8.13 pH	19.41 °C	532.53 µS/cm	0.88 mg/L	4.78 NTU	57.6 mV	7.40 ft	160.00 ml/min
9/17/2021 1:05 PM	16:48	8.13 pH	19.48 °C	534.70 µS/cm	0.90 mg/L	4.11 NTU	57.1 mV	7.84 ft	160.00 ml/min
9/17/2021 1:10 PM	21:48	8.13 pH	19.67 °C	534.38 µS/cm	1.03 mg/L	4.84 NTU	54.9 mV	8.85 ft	120.00 ml/min
9/17/2021 1:15 PM	26:48	8.13 pH	19.70 °C	534.52 µS/cm	1.05 mg/L	4.80 NTU	41.9 mV	9.70 ft	120.00 ml/min
9/17/2021 1:20 PM	31:48	8.14 pH	19.71 °C	534.16 µS/cm	1.07 mg/L	4.75 NTU	40.2 mV	10.53 ft	120.00 ml/min
9/17/2021 1:25 PM	36:48	8.14 pH	19.70 °C	533.97 µS/cm	1.09 mg/L	4.71 NTU	39.1 mV	11.30 ft	120.00 ml/min
9/17/2021 1:30 PM	41:48	8.13 pH	19.68 °C	533.07 µS/cm	1.09 mg/L	4.73 NTU	47.0 mV	12.12 ft	120.00 ml/min
9/17/2021 1:35 PM	46:48	8.13 pH	19.80 °C	533.58 µS/cm	1.10 mg/L	4.61 NTU	37.7 mV	12.83 ft	120.00 ml/min
9/17/2021 1:40 PM	51:48	8.12 pH	19.76 °C	532.62 µS/cm	1.11 mg/L	4.72 NTU	45.5 mV	13.56 ft	120.00 ml/min
9/17/2021 1:45 PM	56:48	8.12 pH	19.72 °C	532.18 µS/cm	1.13 mg/L	4.69 NTU	36.7 mV	14.30 ft	120.00 ml/min
9/17/2021 1:50 PM	01:01:48	8.12 pH	19.76 °C	533.62 µS/cm	1.15 mg/L	4.65 NTU	35.9 mV	14.90 ft	120.00 ml/min
9/17/2021 1:55 PM	01:06:48	8.12 pH	19.78 °C	531.21 µS/cm	1.16 mg/L	4.67 NTU	43.2 mV	15.59 ft	120.00 ml/min
9/17/2021 2:00 PM	01:11:48	8.12 pH	19.82 °C	533.05 µS/cm	1.18 mg/L	4.65 NTU	35.4 mV	16.20 ft	120.00 ml/min

9/17/2021 2:05 PM	01:16:48	8.11 pH	19.80 °C	533.30 µS/cm	1.21 mg/L	4.61 NTU	34.2 mV	16.80 ft	120.00 ml/min
9/17/2021 2:10 PM	01:21:48	8.10 pH	19.94 °C	533.59 µS/cm	1.28 mg/L	4.47 NTU	33.5 mV	17.25 ft	100.00 ml/min
9/17/2021 2:15 PM	01:26:48	8.10 pH	19.94 °C	530.19 µS/cm	1.31 mg/L	4.64 NTU	41.6 mV	17.72 ft	100.00 ml/min
9/17/2021 2:20 PM	01:31:48	8.12 pH	19.84 °C	530.96 µS/cm	1.40 mg/L	4.30 NTU	33.6 mV	18.14 ft	100.00 ml/min
9/17/2021 2:25 PM	01:36:48	8.13 pH	19.94 °C	530.04 µS/cm	1.52 mg/L	4.31 NTU	40.2 mV	18.51 ft	100.00 ml/min
9/17/2021 2:30 PM	01:41:48	8.14 pH	19.88 °C	526.30 µS/cm	1.61 mg/L	4.28 NTU	33.5 mV	18.90 ft	100.00 ml/min
9/17/2021 2:35 PM	01:46:48	8.12 pH	20.74 °C	538.48 µS/cm	4.93 mg/L	4.17 NTU	29.9 mV	18.90 ft	100.00 ml/min
9/17/2021 2:40 PM	01:51:48	8.12 pH	19.23 °C	532.83 µS/cm	1.19 mg/L	4.11 NTU	36.8 mV	19.24 ft	100.00 ml/min
9/17/2021 2:45 PM	01:56:48	8.11 pH	19.95 °C	541.68 µS/cm	4.12 mg/L	3.98 NTU	34.2 mV	19.60 ft	100.00 ml/min
9/17/2021 2:50 PM	02:01:48	8.20 pH	19.30 °C	423.32 µS/cm	8.05 mg/L	3.72 NTU	30.9 mV	20.10 ft	100.00 ml/min
9/17/2021 2:55 PM	02:06:48	7.99 pH	18.45 °C	583.09 µS/cm	0.90 mg/L	2.36 NTU	-53.6 mV	20.70 ft	100.00 ml/min
9/17/2021 3:00 PM	02:11:48	7.97 pH	18.97 °C	586.89 µS/cm	0.55 mg/L	1.99 NTU	-98.9 mV	21.06 ft	100.00 ml/min
9/17/2021 3:05 PM	02:16:48	7.97 pH	19.06 °C	591.59 µS/cm	0.35 mg/L	1.83 NTU	-75.9 mV	21.40 ft	100.00 ml/min
9/17/2021 3:10 PM	02:21:48	7.97 pH	19.01 °C	597.56 µS/cm	0.26 mg/L	1.75 NTU	-80.5 mV	21.65 ft	100.00 ml/min
9/17/2021 3:15 PM	02:26:48	7.97 pH	19.02 °C	604.44 µS/cm	0.23 mg/L	0.83 NTU	-115.3 mV	21.90 ft	100.00 ml/min

Samples

Sample ID:	Description:
B-113D	Complete well evacuation 9/16

Low-Flow Test Report:

Test Date / Time: 9/9/2021 1:23:11 PM

Project: Plant McDonough (3)

Operator Name: D Fulton

Location Name: B-116D Well Diameter: 2 ft Casing Type: PVC Screen Length: 10 ft Top of Screen: 80 ft Total Depth: 90 ft Initial Depth to Water: 42.28 ft	Pump Type: Bladder Pump Tubing Type: Polyethylene Pump Intake From TOC: 85 ft Estimated Total Volume Pumped: 6 liter Flow Cell Volume: 90 ml Final Flow Rate: 200 ml/min Final Draw Down: 0.42 ft	Instrument Used: Aqua TROLL 400 Serial Number: 850767
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Test Notes:

Weather Conditions:

Clear, 82

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth To Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 10 %	+/- 5	+/- 10	+/- 0.3	
9/9/2021 1:23 PM	00:00	6.08 pH	27.12 °C	107.36 µS/cm	7.49 mg/L	2.08 NTU	129.4 mV	42.70 ft	225.00 ml/min
9/9/2021 1:28 PM	05:00	6.01 pH	19.63 °C	108.63 µS/cm	5.72 mg/L	2.30 NTU	82.6 mV	42.68 ft	225.00 ml/min
9/9/2021 1:33 PM	10:00	6.02 pH	19.15 °C	108.98 µS/cm	5.31 mg/L	4.57 NTU	76.7 mV	42.70 ft	200.00 ml/min
9/9/2021 1:38 PM	15:00	6.02 pH	19.15 °C	109.01 µS/cm	5.06 mg/L	4.78 NTU	75.7 mV	42.70 ft	200.00 ml/min
9/9/2021 1:43 PM	20:00	6.02 pH	19.10 °C	109.27 µS/cm	4.90 mg/L	5.00 NTU	75.0 mV	42.70 ft	200.00 ml/min
9/9/2021 1:48 PM	25:00	6.02 pH	19.15 °C	109.39 µS/cm	4.82 mg/L	3.64 NTU	75.0 mV	42.70 ft	200.00 ml/min
9/9/2021 1:53 PM	30:00	6.02 pH	19.23 °C	108.28 µS/cm	4.72 mg/L	3.76 NTU	75.1 mV	42.70 ft	200.00 ml/min

Samples

Sample ID:	Description:
B-116D	

Low-Flow Test Report:

Test Date / Time: 9/8/2021 3:44:20 PM

Project: Plant McDonough (3)

Operator Name: Erik Rheams

Location Name: B-117D Well Diameter: 2 in Casing Type: PVC Screen Length: 10 ft Top of Screen: 69.03 ft Total Depth: 79.03 ft Initial Depth to Water: 28.41 ft	Pump Type: dedicated Tubing Type: Polyethylene Pump Intake From TOC: 74 ft Estimated Total Volume Pumped: 5400 ml Flow Cell Volume: 90 ml Final Flow Rate: 180 ml/min Final Draw Down: 0.92 ft	Instrument Used: Aqua TROLL 400 Serial Number: 850751
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Test Notes:

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth To Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 10 %	+/- 5	+/- 10	+/- 0.3	
9/8/2021 3:44 PM	00:00	6.16 pH	25.97 °C	127.86 µS/cm	4.21 mg/L	8.02 NTU	166.9 mV	28.41 ft	180.00 ml/min
9/8/2021 3:49 PM	05:00	6.00 pH	20.57 °C	152.23 µS/cm	2.36 mg/L	19.40 NTU	129.8 mV	29.01 ft	180.00 ml/min
9/8/2021 3:54 PM	10:00	5.99 pH	20.55 °C	152.76 µS/cm	2.14 mg/L	12.30 NTU	111.2 mV	29.22 ft	180.00 ml/min
9/8/2021 3:59 PM	15:00	5.99 pH	20.51 °C	151.83 µS/cm	2.12 mg/L	8.31 NTU	103.7 mV	29.29 ft	180.00 ml/min
9/8/2021 4:04 PM	20:00	6.00 pH	19.98 °C	151.17 µS/cm	2.16 mg/L	6.67 NTU	100.8 mV	29.32 ft	180.00 ml/min
9/8/2021 4:09 PM	25:00	6.00 pH	20.04 °C	144.41 µS/cm	2.09 mg/L	6.66 NTU	100.2 mV	29.32 ft	180.00 ml/min
9/8/2021 4:14 PM	30:00	6.00 pH	20.16 °C	147.22 µS/cm	2.02 mg/L	4.88 NTU	98.3 mV	29.33 ft	180.00 ml/min

Samples

Sample ID:	Description:
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Low-Flow Test Report:

Test Date / Time: 9/8/2021 1:11:12 PM

Project: Plant McDonough

Operator Name: K. Minkara

Location Name: B-118 Well Diameter: 2 in Casing Type: PVC Screen Length: 10 ft Top of Screen: 68.32 ft Total Depth: 78.32 ft Initial Depth to Water: 50.46 ft	Pump Type: Bladder Tubing Type: Polyethylene Pump Intake From TOC: 73 ft Estimated Total Volume Pumped: 6000 ml Flow Cell Volume: 90 ml Final Flow Rate: 240 ml/min Final Draw Down: 0.27 ft	Instrument Used: Aqua TROLL 400 Serial Number: 850724
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Test Notes:

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth To Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 10 %	+/- 5	+/- 10	+/- 0.3	
9/8/2021 1:11 PM	00:00	6.08 pH	28.14 °C	102.33 µS/cm	6.23 mg/L	10.11 NTU	136.9 mV	50.46 ft	240.00 ml/min
9/8/2021 1:16 PM	05:00	6.02 pH	19.77 °C	90.18 µS/cm	5.01 mg/L	10.81 NTU	94.1 mV	50.70 ft	240.00 ml/min
9/8/2021 1:21 PM	10:00	6.02 pH	18.98 °C	90.32 µS/cm	4.87 mg/L	7.53 NTU	90.7 mV	50.73 ft	240.00 ml/min
9/8/2021 1:26 PM	15:00	6.02 pH	18.88 °C	89.52 µS/cm	4.89 mg/L	5.29 NTU	89.6 mV	50.73 ft	240.00 ml/min
9/8/2021 1:31 PM	20:00	6.01 pH	18.70 °C	89.15 µS/cm	4.81 mg/L	3.74 NTU	89.0 mV	50.73 ft	240.00 ml/min
9/8/2021 1:36 PM	25:00	6.01 pH	18.91 °C	91.98 µS/cm	4.70 mg/L	2.05 NTU	88.6 mV	50.73 ft	240.00 ml/min

Samples

Sample ID:	Description:
B-118	

Low-Flow Test Report:

Test Date / Time: 9/8/2021 2:27:01 PM

Project: Plant McDonough

Operator Name: K. Minkara

Location Name: B-119D Well Diameter: 2 in Casing Type: PVC Screen Length: 10 ft Top of Screen: 97.98 ft Total Depth: 107.98 ft Initial Depth to Water: 46.88 ft	Pump Type: Bladder Tubing Type: Polyethylene Pump Intake From TOC: 103 ft Estimated Total Volume Pumped: 6600 ml Flow Cell Volume: 90 ml Final Flow Rate: 100 ml/min Final Draw Down: 3.97 ft	Instrument Used: Aqua TROLL 400 Serial Number: 850724
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Test Notes:

Well labeled as GPC-119D

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth To Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 10 %	+/- 5	+/- 10	+/- 0.3	
9/8/2021 2:27 PM	00:00	6.62 pH	24.37 °C	160.70 µS/cm	5.26 mg/L	56.40 NTU	-79.8 mV	46.88 ft	180.00 ml/min
9/8/2021 2:32 PM	05:00	7.32 pH	19.72 °C	697.68 µS/cm	0.69 mg/L	25.20 NTU	-63.3 mV	47.43 ft	180.00 ml/min
9/8/2021 2:37 PM	10:00	7.26 pH	19.33 °C	622.03 µS/cm	0.49 mg/L	14.30 NTU	-73.6 mV	48.64 ft	180.00 ml/min
9/8/2021 2:42 PM	15:00	7.07 pH	19.14 °C	530.44 µS/cm	0.59 mg/L	10.32 NTU	-35.7 mV	49.48 ft	180.00 ml/min
9/8/2021 2:47 PM	20:00	6.80 pH	19.14 °C	378.29 µS/cm	1.15 mg/L	5.34 NTU	8.3 mV	50.33 ft	100.00 ml/min
9/8/2021 2:52 PM	25:00	6.75 pH	20.06 °C	372.43 µS/cm	1.56 mg/L	4.83 NTU	22.2 mV	50.59 ft	100.00 ml/min
9/8/2021 2:57 PM	30:00	6.73 pH	20.41 °C	345.91 µS/cm	1.60 mg/L	2.62 NTU	27.7 mV	50.70 ft	100.00 ml/min
9/8/2021 3:02 PM	35:00	6.72 pH	20.57 °C	335.13 µS/cm	1.73 mg/L	3.76 NTU	33.0 mV	50.73 ft	100.00 ml/min
9/8/2021 3:07 PM	40:00	6.70 pH	20.41 °C	313.36 µS/cm	1.69 mg/L	1.57 NTU	31.1 mV	50.78 ft	100.00 ml/min
9/8/2021 3:12 PM	45:00	6.69 pH	20.43 °C	315.99 µS/cm	1.64 mg/L	0.88 NTU	37.3 mV	50.83 ft	100.00 ml/min
9/8/2021 3:17 PM	50:00	6.68 pH	20.36 °C	305.64 µS/cm	1.64 mg/L	0.93 NTU	33.6 mV	50.85 ft	100.00 ml/min

Samples

Sample ID:	Description:
B-119D	

APPENDIX A

Instrument Calibration Records

Include daily mid-day pH check

Project Plant McDonough
 Field Staff J.Waguespack / E. Rheams / K. Minkara / D. Fulton

Instrument Calibration

Date: 09/09/21 09/13/21 09/14/21 09/14/21
 Time: 07:33 07:30 07:15

Parameter	Units	Standard	SmarTROLL SN 85075 iPad # 81	SmarTROLL SN 85075 iPad # 81	SmarTROLL SN 85075 iPad # 81	SmarTROLL SN 843917 iPad # 109
DO	% saturation	100	99.46	105.94	98.17	100.52
Conductivity	us/cm	4490	4509.7	4645.9	4257.4	4305.5
pH	S.U.	4.00	4.00	4.05	3.95	4.00
pH	S.U.	7.00	7.05	7.05	6.95	7.00
pH	S.U.	10.00	10.37	10.04	9.95	9.97
ORP	mV	228.00	228	225.3	229.4	226.1

Turbidity	Units	Standard	LaMotte SN 5990-3915	LaMotte SN 50410-3915	LaMotte SN 5990-3915	LaMotte SN 7007-1916
	NTU	0.0	0.0	0.0	0.77	0.33
	NTU	1.0	0.93	1.25	2.17	0.95
	NTU	10.0	9.03	9.87	9.109	10.14

Date: 09/10/21 09/13/21 09/14/21
 Time: 07:25 16:30 15:37

Parameter	Units	Standard	SmarTROLL SN 85075 iPad # 81	SmarTROLL SN 85075 iPad # 81	SmarTROLL SN 85075 iPad # 81	SmarTROLL SN iPad #
DO	% saturation	100	94.96			
Conductivity	us/cm	4490	4471.2			
pH	S.U.	4.00	4.02	4.03	4.01	
pH	S.U.	7.00	7.02	7.03	7.03	
pH	S.U.	10.00	10.05	9.78	9.69	
ORP	mV	228.00	234.0			

Turbidity	Units	Standard	LaMotte SN 5990-3915	LaMotte SN	LaMotte SN	LaMotte SN
	NTU	0.0	0.01			
	NTU	1.0	0.98			
	NTU	10.0	9.28			

Notes: DO - Dissolved Oxygen; us/cm - microsiemens/centimeter; ORP - oxidation-reduction potential; mV - millivolts; NTU - Nphelometric Turbidity Units; NC - Not calibrated

Project Plant McDonough **Include daily mid-day pH check**
 Field Staff J. Waguespack / E. Rheams / K. Minkara / D. Fulton

Instrument Calibration

Date: 09/15/21 09/15/21 09/16/21
 Time: 07:30 08:00 08:00

Parameter	Units	Standard	SmarTROLL SN <u>850717</u> iPad # <u>81</u>	SmarTROLL SN <u>843593</u> iPad # <u>109</u>	SmarTROLL SN <u>850767</u> iPad # <u>81</u>	SmarTROLL SN _____ iPad # _____
DO	% saturation	100	99.83	97.73	101.90	
Conductivity	us/cm	4490	4426	4524.6	4476.6	
pH	S.U.	4.00	3.94	4.03	4.00	
pH	S.U.	7.00	6.92	7.00	7.00	
pH	S.U.	10.00	9.95	10.02	9.98	
ORP	mV	228.00	225.6	220.8	236.6	

	Units	Standard	LaMotte SN <u>5990-3915</u>	LaMotte SN <u>7007-1416</u>	LaMotte SN <u>5990-3915</u>	LaMotte SN _____
Turbidity	NTU	0.0	0.0	0.01	0.68	
	NTU	1.0	0.92	0.87	0.81	
	NTU	10.0	9.93	9.98	9.64	

Date: 09/16/21 09/16/21
 Time: 0800

Parameter	Units	Standard	SmarTROLL SN <u>843573</u> iPad # <u>109</u>	SmarTROLL SN <u>850767</u> iPad # <u>51</u>	SmarTROLL SN _____ iPad # _____	SmarTROLL SN _____ iPad # _____
DO	% saturation	100	101.72			
Conductivity	us/cm	4490	4535.9			
pH	S.U.	4.00	4.04	4.01		
pH	S.U.	7.00	7.06	7.03		
pH	S.U.	10.00	10.00	10.07		
ORP	mV	228.00	229.0			

	Units	Standard	LaMotte SN <u>7007-1416</u>	LaMotte SN _____	LaMotte SN _____	LaMotte SN _____
Turbidity	NTU	0.0	0.02			
	NTU	1.0	1.18			
	NTU	10.0	10.02			

Notes: DO - Dissolved Oxygen; us/cm - microsiemens/centimeter; ORP - oxidation-reduction potential; mV - millivolts; NTU - Nephelometric Turbidity Units; NC - Not calibrated

Include daily mid-day pH check

Project Plant McDonough
 Field Staff J.Waguespack / E. Rheams / K. Minkara / D. Fulton

Instrument Calibration

Date: 09/09/21 | 9/10/21 | 9/13/21 | 9/13/21
 Time: 08:05 | 07:51 | 09:24 | 12:30

Parameter	Units	Standard	SmarTROLL SN 843593 iPad # 109	SmarTROLL SN 843593 iPad # 109	SmarTROLL SN 843593 iPad # 109	SmarTROLL SN _____ iPad # _____
DO	% saturation	100	98.51	106.00	96.53	
Conductivity	us/cm	4490	4722.8	4491.6	4693.1	
pH	S.U.	4.00	4.01	4.01	4.12	
pH	S.U.	7.00	7.05	7.01	7.07	7.00
pH	S.U.	10.00	9.98	10.05	10.03	
ORP	mV	228.00	227	235.5	228.0	

Turbidity	Units	Standard	LaMotte SN 7007-1416	LaMotte SN 7007-1416	LaMotte SN 7007-1416	LaMotte SN _____
	NTU	0.0	0.56	0.0	0.05	
	NTU	1.0	1.15	1.08	0.98	
	NTU	10.0	9.30	7.54	8.88	

Date: 9/13/21
 Time: 11:00

Parameter	Units	Standard	SmarTROLL SN 850724 iPad # _____	SmarTROLL SN _____ iPad # _____	SmarTROLL SN _____ iPad # _____	SmarTROLL SN _____ iPad # _____
DO	% saturation	100	100.52			
Conductivity	us/cm	4490	4684.5			
pH	S.U.	4.00	4.02			
pH	S.U.	7.00	7.03			
pH	S.U.	10.00	10.0			
ORP	mV	228.00	220.5			

Turbidity	Units	Standard	LaMotte SN 1510-4111	LaMotte SN _____	LaMotte SN _____	LaMotte SN _____
	NTU	0.0	-0.02			
	NTU	1.0	0.84			
	NTU	10.0	12.73			

Notes: DO - Dissolved Oxygen; us/cm - microsiemens/centimeter; ORP - oxidation-reduction potential; mV - millivolts; NTU - Nephelometric Turbidity Units; NC - Not calibrated

Include daily mid-day pH check

Project Plant McDonough
 Field Staff J.Waguespack / E. Rheams / K. Minkara / D. Fulton

Instrument Calibration

Date: 9-8-21 9-7-21 9-10-21
 Time: 1110 0830 1030

Parameter	Units	Standard	SmarTROLL SN 850724 iPad # 55	SmarTROLL SN 850724 iPad # 55	SmarTROLL SN 850724 iPad # 55	SmarTROLL SN _____ iPad # _____
DO	% saturation	100	99.83	98.53	101.94	
Conductivity	us/cm	4490	3850	5244	4796	
pH	S.U.	4.00	3.50	3.99	3.98	
pH	S.U.	7.00	7.23	7.00	7.02	
pH	S.U.	10.00	9.97	9.96	10.04	
ORP	mV	228.00	223.8	227.4	232.6	

Turbidity	Units	Standard	LaMotte SN 1510-4111	LaMotte SN 1510-4111	LaMotte SN 1510-4111	LaMotte SN _____
	NTU	0.0	0.08	0.08	0.06	
	NTU	1.0	1.09	1.00	1.11	
	NTU	10.0	9.74	10.01	9.88	

Date: 9/8/21
 Time: 7w

Parameter	Units	Standard	SmarTROLL SN 84297 iPad # 109	SmarTROLL SN _____ iPad # _____	SmarTROLL SN _____ iPad # _____	SmarTROLL SN _____ iPad # _____
DO	% saturation	100	98.86			
Conductivity	us/cm	4490	3852.3			
pH	S.U.	4.00	4.08			
pH	S.U.	7.00	7.07			
pH	S.U.	10.00	10.37			
ORP	mV	228.00	217.8			

Turbidity	Units	Standard	LaMotte SN _____	LaMotte SN _____	LaMotte SN _____	LaMotte SN _____
	NTU	0.0				
	NTU	1.0				
	NTU	10.0				

Notes: DO - Dissolved Oxygen; us/cm - microsiemens/centimeter; ORP - oxidation-reduction potential; mV - millivolts; NTU - Nphelometric Turbidity Units; NC - Not calibrated

Project Plant McDonough
 Field Staff *JUDE WAGUESPAK*

Include daily mid-day pH check

Instrument Calibration

Date: *10/27/21*
 Time: *13:55*

Parameter	Units	Standard	SmarTROLL SN <i>850162</i> iPad # <i>74</i>	SmarTROLL SN _____ iPad # _____	SmarTROLL SN _____ iPad # _____	SmarTROLL SN _____ iPad # _____
DO	% saturation	100	<i>102.35</i>			
Conductivity	us/cm	4490	<i>4378.8</i>			
pH	S.U.	4.00	<i>4.07</i>			
pH	S.U.	7.00	<i>6.96</i>			
pH	S.U.	10.00	<i>10.16</i>			
ORP	mV	228.00	<i>219.7</i>			

Turbidity	Units	Standard	LaMotte SN <i>568-0111</i>	LaMotte SN	LaMotte SN	LaMotte SN
	NTU	0.0	<i>0.00</i>			
	NTU	1.0	<i>0.92</i>			
	NTU	10.0	<i>7.67</i>			

Date:
 Time:

Parameter	Units	Standard	SmarTROLL SN _____ iPad # _____	SmarTROLL SN _____ iPad # _____	SmarTROLL SN _____ iPad # _____	SmarTROLL SN _____ iPad # _____
DO	% saturation	100				
Conductivity	us/cm	4490				
pH	S.U.	4.00				
pH	S.U.	7.00				
pH	S.U.	10.00				
ORP	mV	228.00				

Turbidity	Units	Standard	LaMotte SN	LaMotte SN	LaMotte SN	LaMotte SN
	NTU	0.0				
	NTU	1.0				
	NTU	10.0				

Notes: DO - Dissolved Oxygen; us/cm - microsiemens/centimeter; ORP - oxidation-reduction potential; mV - millivolts; NTU - Nephelometric Turbidity Units; NC - Not calibrated

APPENDIX B

Analytical Results, Data Validation Summaries, and Laboratory Accreditation

APPENDIX B

Analytical Results

October 06, 2021

Joju Abraham
Georgia Power-CCR
2480 Maner Road
Atlanta, GA 30339

RE: Project: MCDONOUGH AP-1
Pace Project No.: 92561303

Dear Joju Abraham:

Enclosed are the analytical results for sample(s) received by the laboratory between September 15, 2021 and September 17, 2021. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

- Pace Analytical Services - Asheville
- Pace Analytical Services - Charlotte
- Pace Analytical Services - Peachtree Corners, GA

If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Nicole D'Oleo
nicole.d'oleo@pacelabs.com
(704)875-9092
Project Manager

Enclosures

cc: Stephen Benda
Daniela Herrera, Golder
Ben Hodges, Georgia Power
Kristen Jurinko
J. Shelby Mobley
Charles Norton, Southern Company
Ms. Lauren Petty, Southern Company
Dawn Prell, Golder Associates Inc.
Tim Richards, Golder Associates - Atlanta



REPORT OF LABORATORY ANALYSIS

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CERTIFICATIONS

Project: MCDONOUGH AP-1

Pace Project No.: 92561303

Pace Analytical Services Charlotte

9800 Kinsey Ave. Ste 100, Huntersville, NC 28078
Louisiana/NELAP Certification # LA170028
North Carolina Drinking Water Certification #: 37706
North Carolina Field Services Certification #: 5342
North Carolina Wastewater Certification #: 12

South Carolina Certification #: 99006001
Florida/NELAP Certification #: E87627
Kentucky UST Certification #: 84
Virginia/VELAP Certification #: 460221

Pace Analytical Services Asheville

2225 Riverside Drive, Asheville, NC 28804
Florida/NELAP Certification #: E87648
North Carolina Drinking Water Certification #: 37712

North Carolina Wastewater Certification #: 40
South Carolina Certification #: 99030001
Virginia/VELAP Certification #: 460222

Pace Analytical Services Peachtree Corners

110 Technology Pkwy, Peachtree Corners, GA 30092
Florida DOH Certification #: E87315
Georgia DW Inorganics Certification #: 812

North Carolina Certification #: 381
South Carolina Certification #: 98011001

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SAMPLE SUMMARY

Project: MCDONOUGH AP-1

Pace Project No.: 92561303

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92561303001	DGWC-40	Water	09/14/21 16:30	09/15/21 09:34
92561303002	FB-4	Water	09/14/21 16:15	09/15/21 09:34
92561303003	DGWC-38	Water	09/15/21 15:45	09/16/21 09:06
92561303004	DGWC-37	Water	09/16/21 16:50	09/17/21 17:06
92561303005	DGWC-39	Water	09/17/21 10:30	09/17/21 17:06
92561303006	DGWC-67	Water	09/16/21 15:00	09/17/21 17:06
92561303007	DGWC-68A	Water	09/16/21 14:16	09/17/21 17:06
92561303008	DGWC-69	Water	09/16/21 10:35	09/17/21 17:06
92561303009	DUP-6	Water	09/16/21 00:00	09/17/21 17:06

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SAMPLE ANALYTE COUNT

Project: MCDONOUGH AP-1
Pace Project No.: 92561303

Lab ID	Sample ID	Method	Analysts	Analytes Reported
92561303001	DGWC-40	EPA 6010D	KH	1
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2011	ALW	1
		EPA 300.0 Rev 2.1 1993	CDC	3
92561303002	FB-4	EPA 6010D	KH	1
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2011	ALW	1
		EPA 300.0 Rev 2.1 1993	CDC	3
92561303003	DGWC-38	EPA 6010D	KH	1
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2011	ALW	1
		EPA 300.0 Rev 2.1 1993	CDC	3
92561303004	DGWC-37	EPA 6010D	KH	1
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2011	ALW	1
		EPA 300.0 Rev 2.1 1993	CDC	3
92561303005	DGWC-39	EPA 6010D	KH	1
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2011	ALW	1
		EPA 300.0 Rev 2.1 1993	CDC	3
92561303006	DGWC-67	EPA 6010D	KH	1
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2011	ALW	1
		EPA 300.0 Rev 2.1 1993	CDC	3
92561303007	DGWC-68A	EPA 6010D	KH	1
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2011	ALW	1
		EPA 300.0 Rev 2.1 1993	CDC	3
92561303008	DGWC-69	EPA 6010D	KH	1
		EPA 6020B	CW1	13

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SAMPLE ANALYTE COUNT

Project: MCDONOUGH AP-1

Pace Project No.: 92561303

Lab ID	Sample ID	Method	Analysts	Analytes Reported
		EPA 7470A	VB	1
		SM 2540C-2011	ALW	1
		EPA 300.0 Rev 2.1 1993	CDC	3
92561303009	DUP-6	EPA 6010D	KH	1
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2011	ALW	1
		EPA 300.0 Rev 2.1 1993	CDC	3

PASI-A = Pace Analytical Services - Asheville

PASI-C = Pace Analytical Services - Charlotte

PASI-GA = Pace Analytical Services - Peachtree Corners, GA

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: MCDONOUGH AP-1
Pace Project No.: 92561303

Sample: DGWC-40		Lab ID: 92561303001		Collected: 09/14/21 16:30		Received: 09/15/21 09:34		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data									
Analytical Method: Pace Analytical Services - Charlotte									
Performed by	CUSTOMER				1		09/15/21 11:10		
pH	4.67	Std. Units			1		09/15/21 11:10		
6010D ATL ICP									
Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA									
Calcium	45.1	mg/L	1.0	0.12	1	09/29/21 10:10	09/29/21 17:02	7440-70-2	M1
6020 MET ICPMS									
Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA									
Antimony	ND	mg/L	0.0030	0.00078	1	09/24/21 08:24	09/24/21 16:34	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0011	1	09/24/21 08:24	09/24/21 16:34	7440-38-2	
Barium	0.027	mg/L	0.0050	0.00067	1	09/24/21 08:24	09/24/21 16:34	7440-39-3	
Beryllium	0.0032	mg/L	0.00050	0.000054	1	09/24/21 08:24	09/24/21 16:34	7440-41-7	
Boron	0.70	mg/L	0.040	0.0086	1	09/24/21 08:24	09/24/21 16:34	7440-42-8	
Cadmium	0.00086	mg/L	0.00050	0.00011	1	09/24/21 08:24	09/24/21 16:34	7440-43-9	
Chromium	0.0021J	mg/L	0.0050	0.0011	1	09/24/21 08:24	09/24/21 16:34	7440-47-3	
Cobalt	0.050	mg/L	0.0050	0.00039	1	09/24/21 08:24	09/24/21 16:34	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	09/24/21 08:24	09/24/21 16:34	7439-92-1	
Lithium	0.0030J	mg/L	0.030	0.00073	1	09/24/21 08:24	09/24/21 16:34	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	09/24/21 08:24	09/24/21 16:34	7439-98-7	
Selenium	0.0015J	mg/L	0.0050	0.0014	1	09/24/21 08:24	09/24/21 16:34	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	09/24/21 08:24	09/24/21 16:34	7440-28-0	
7470 Mercury									
Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA									
Mercury	ND	mg/L	0.00020	0.000078	1	09/28/21 11:00	09/28/21 19:12	7439-97-6	
2540C Total Dissolved Solids									
Analytical Method: SM 2540C-2011 Pace Analytical Services - Peachtree Corners, GA									
Total Dissolved Solids	347	mg/L	10.0	10.0	1		09/21/21 12:34		
300.0 IC Anions 28 Days									
Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville									
Chloride	16.7	mg/L	1.0	0.60	1		09/17/21 08:03	16887-00-6	
Fluoride	0.13	mg/L	0.10	0.050	1		09/17/21 08:03	16984-48-8	
Sulfate	186	mg/L	4.0	2.0	4		09/17/21 23:23	14808-79-8	

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ANALYTICAL RESULTS

Project: MCDONOUGH AP-1
Pace Project No.: 92561303

Sample: FB-4		Lab ID: 92561303002		Collected: 09/14/21 16:15	Received: 09/15/21 09:34	Matrix: Water				
Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual	
			Limit	MDL	DF					
6010D ATL ICP		Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Calcium	ND	mg/L	1.0	0.12	1	09/29/21 10:10	09/29/21 17:21	7440-70-2		
6020 MET ICPMS		Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	ND	mg/L	0.0030	0.00078	1	09/24/21 08:24	09/24/21 17:53	7440-36-0		
Arsenic	ND	mg/L	0.0050	0.0011	1	09/24/21 08:24	09/24/21 17:53	7440-38-2		
Barium	ND	mg/L	0.0050	0.00067	1	09/24/21 08:24	09/24/21 17:53	7440-39-3		
Beryllium	ND	mg/L	0.00050	0.000054	1	09/24/21 08:24	09/24/21 17:53	7440-41-7		
Boron	ND	mg/L	0.040	0.0086	1	09/24/21 08:24	09/24/21 17:53	7440-42-8		
Cadmium	ND	mg/L	0.00050	0.00011	1	09/24/21 08:24	09/24/21 17:53	7440-43-9		
Chromium	ND	mg/L	0.0050	0.0011	1	09/24/21 08:24	09/24/21 17:53	7440-47-3		
Cobalt	ND	mg/L	0.0050	0.00039	1	09/24/21 08:24	09/24/21 17:53	7440-48-4		
Lead	ND	mg/L	0.0010	0.00089	1	09/24/21 08:24	09/24/21 17:53	7439-92-1		
Lithium	ND	mg/L	0.030	0.00073	1	09/24/21 08:24	09/24/21 17:53	7439-93-2		
Molybdenum	ND	mg/L	0.010	0.00074	1	09/24/21 08:24	09/24/21 17:53	7439-98-7		
Selenium	ND	mg/L	0.0050	0.0014	1	09/24/21 08:24	09/24/21 17:53	7782-49-2		
Thallium	ND	mg/L	0.0010	0.00018	1	09/24/21 08:24	09/24/21 17:53	7440-28-0		
7470 Mercury		Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00020	0.000078	1	09/28/21 11:00	09/28/21 19:15	7439-97-6		
2540C Total Dissolved Solids		Analytical Method: SM 2540C-2011 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	ND	mg/L	10.0	10.0	1		09/21/21 12:34			
300.0 IC Anions 28 Days		Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	ND	mg/L	1.0	0.60	1		09/17/21 08:18	16887-00-6		
Fluoride	ND	mg/L	0.10	0.050	1		09/17/21 08:18	16984-48-8		
Sulfate	ND	mg/L	1.0	0.50	1		09/17/21 08:18	14808-79-8		

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ANALYTICAL RESULTS

Project: MCDONOUGH AP-1
Pace Project No.: 92561303

Sample: DGWC-38		Lab ID: 92561303003		Collected: 09/15/21 15:45		Received: 09/16/21 09:06		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data									
Analytical Method: Pace Analytical Services - Charlotte									
Performed by	CUSTOMER				1		09/16/21 11:20		
pH	6.08	Std. Units			1		09/16/21 11:20		
6010D ATL ICP									
Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA									
Calcium	88.3	mg/L	1.0	0.12	1	09/29/21 10:10	09/29/21 17:26	7440-70-2	
6020 MET ICPMS									
Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA									
Antimony	ND	mg/L	0.0030	0.00078	1	09/24/21 08:24	09/24/21 18:05	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0011	1	09/24/21 08:24	09/24/21 18:05	7440-38-2	
Barium	0.032	mg/L	0.0050	0.00067	1	09/24/21 08:24	09/24/21 18:05	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	09/24/21 08:24	09/24/21 18:05	7440-41-7	
Boron	2.8	mg/L	0.040	0.0086	1	09/24/21 08:24	09/24/21 18:05	7440-42-8	
Cadmium	0.00021J	mg/L	0.00050	0.00011	1	09/24/21 08:24	09/24/21 18:05	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	09/24/21 08:24	09/24/21 18:05	7440-47-3	
Cobalt	0.0016J	mg/L	0.0050	0.00039	1	09/24/21 08:24	09/24/21 18:05	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	09/24/21 08:24	09/24/21 18:05	7439-92-1	
Lithium	0.0029J	mg/L	0.030	0.00073	1	09/24/21 08:24	09/24/21 18:05	7439-93-2	
Molybdenum	0.00099J	mg/L	0.010	0.00074	1	09/24/21 08:24	09/24/21 18:05	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	09/24/21 08:24	09/24/21 18:05	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	09/24/21 08:24	09/24/21 18:05	7440-28-0	
7470 Mercury									
Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA									
Mercury	ND	mg/L	0.00020	0.000078	1	09/28/21 11:00	09/28/21 19:17	7439-97-6	
2540C Total Dissolved Solids									
Analytical Method: SM 2540C-2011 Pace Analytical Services - Peachtree Corners, GA									
Total Dissolved Solids	474	mg/L	10.0	10.0	1		09/21/21 19:08		
300.0 IC Anions 28 Days									
Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville									
Chloride	7.6	mg/L	1.0	0.60	1		09/18/21 03:05	16887-00-6	
Fluoride	0.060J	mg/L	0.10	0.050	1		09/18/21 03:05	16984-48-8	
Sulfate	219	mg/L	5.0	2.5	5		09/18/21 13:06	14808-79-8	

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ANALYTICAL RESULTS

Project: MCDONOUGH AP-1
Pace Project No.: 92561303

Sample: DGWC-37		Lab ID: 92561303004		Collected: 09/16/21 16:50		Received: 09/17/21 17:06		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data									
Analytical Method: Pace Analytical Services - Charlotte									
Performed by	CUSTOMER				1		09/20/21 14:46		
pH	6.33	Std. Units			1		09/20/21 14:46		
6010D ATL ICP									
Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA									
Calcium	63.0	mg/L	1.0	0.12	1	09/29/21 10:10	09/29/21 18:31	7440-70-2	
6020 MET ICPMS									
Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA									
Antimony	ND	mg/L	0.0030	0.00078	1	09/27/21 12:10	09/28/21 15:21	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0011	1	09/27/21 12:10	09/28/21 15:21	7440-38-2	
Barium	0.083	mg/L	0.0050	0.00067	1	09/27/21 12:10	09/28/21 15:21	7440-39-3	
Beryllium	0.000059J	mg/L	0.00050	0.000054	1	09/27/21 12:10	09/28/21 15:21	7440-41-7	
Boron	1.4	mg/L	0.040	0.0086	1	09/27/21 12:10	09/28/21 15:21	7440-42-8	
Cadmium	0.00013J	mg/L	0.00050	0.00011	1	09/27/21 12:10	09/28/21 15:21	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	09/27/21 12:10	09/28/21 15:21	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00039	1	09/27/21 12:10	09/28/21 15:21	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	09/27/21 12:10	09/28/21 15:21	7439-92-1	
Lithium	0.0021J	mg/L	0.030	0.00073	1	09/27/21 12:10	09/28/21 15:21	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	09/27/21 12:10	09/28/21 15:21	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	09/27/21 12:10	09/28/21 15:21	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	09/27/21 12:10	09/28/21 15:21	7440-28-0	
7470 Mercury									
Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA									
Mercury	ND	mg/L	0.00020	0.000078	1	09/28/21 11:00	09/28/21 19:20	7439-97-6	
2540C Total Dissolved Solids									
Analytical Method: SM 2540C-2011 Pace Analytical Services - Peachtree Corners, GA									
Total Dissolved Solids	278	mg/L	10.0	10.0	1		09/23/21 20:01		
300.0 IC Anions 28 Days									
Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville									
Chloride	5.6	mg/L	1.0	0.60	1		09/21/21 15:28	16887-00-6	
Fluoride	0.084J	mg/L	0.10	0.050	1		09/21/21 15:28	16984-48-8	M1
Sulfate	95.0	mg/L	1.0	0.50	1		09/21/21 15:28	14808-79-8	M1

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ANALYTICAL RESULTS

Project: MCDONOUGH AP-1
Pace Project No.: 92561303

Sample: DGWC-39		Lab ID: 92561303005		Collected: 09/17/21 10:30		Received: 09/17/21 17:06		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data									
Analytical Method: Pace Analytical Services - Charlotte									
Performed by	CUSTOMER				1		09/20/21 14:47		
pH	6.49	Std. Units			1		09/20/21 14:47		
6010D ATL ICP									
Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA									
Calcium	98.6	mg/L	1.0	0.12	1	09/29/21 10:10	09/29/21 18:36	7440-70-2	
6020 MET ICPMS									
Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA									
Antimony	ND	mg/L	0.0030	0.00078	1	09/27/21 12:10	09/28/21 15:26	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0011	1	09/27/21 12:10	09/28/21 15:26	7440-38-2	
Barium	0.090	mg/L	0.0050	0.00067	1	09/27/21 12:10	09/28/21 15:26	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	09/27/21 12:10	09/28/21 15:26	7440-41-7	
Boron	2.8	mg/L	0.040	0.0086	1	09/27/21 12:10	09/28/21 15:26	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	09/27/21 12:10	09/28/21 15:26	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	09/27/21 12:10	09/28/21 15:26	7440-47-3	
Cobalt	0.0076	mg/L	0.0050	0.00039	1	09/27/21 12:10	09/28/21 15:26	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	09/27/21 12:10	09/28/21 15:26	7439-92-1	
Lithium	ND	mg/L	0.030	0.00073	1	09/27/21 12:10	09/28/21 15:26	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	09/27/21 12:10	09/28/21 15:26	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	09/27/21 12:10	09/28/21 15:26	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	09/27/21 12:10	09/28/21 15:26	7440-28-0	
7470 Mercury									
Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA									
Mercury	ND	mg/L	0.00020	0.000078	1	09/28/21 11:00	09/28/21 19:23	7439-97-6	
2540C Total Dissolved Solids									
Analytical Method: SM 2540C-2011 Pace Analytical Services - Peachtree Corners, GA									
Total Dissolved Solids	446	mg/L	20.0	20.0	1		09/23/21 20:02		
300.0 IC Anions 28 Days									
Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville									
Chloride	8.3	mg/L	1.0	0.60	1		09/21/21 16:14	16887-00-6	
Fluoride	0.13	mg/L	0.10	0.050	1		09/21/21 16:14	16984-48-8	
Sulfate	156	mg/L	3.0	1.5	3		09/22/21 04:24	14808-79-8	

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ANALYTICAL RESULTS

Project: MCDONOUGH AP-1
Pace Project No.: 92561303

Sample: DGWC-67		Lab ID: 92561303006		Collected: 09/16/21 15:00		Received: 09/17/21 17:06		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data									
Analytical Method: Pace Analytical Services - Charlotte									
Performed by	CUSTOMER				1		09/20/21 14:47		
pH	6.20	Std. Units			1		09/20/21 14:47		
6010D ATL ICP									
Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA									
Calcium	46.0	mg/L	1.0	0.12	1	09/29/21 10:10	09/29/21 18:41	7440-70-2	
6020 MET ICPMS									
Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA									
Antimony	ND	mg/L	0.0030	0.00078	1	09/27/21 12:10	09/28/21 15:32	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0011	1	09/27/21 12:10	09/28/21 15:32	7440-38-2	
Barium	0.088	mg/L	0.0050	0.00067	1	09/27/21 12:10	09/28/21 15:32	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	09/27/21 12:10	09/28/21 15:32	7440-41-7	
Boron	3.4	mg/L	0.040	0.0086	1	09/27/21 12:10	09/28/21 15:32	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	09/27/21 12:10	09/28/21 15:32	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	09/27/21 12:10	09/28/21 15:32	7440-47-3	
Cobalt	0.0012J	mg/L	0.0050	0.00039	1	09/27/21 12:10	09/28/21 15:32	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	09/27/21 12:10	09/28/21 15:32	7439-92-1	
Lithium	0.0044J	mg/L	0.030	0.00073	1	09/27/21 12:10	09/28/21 15:32	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	09/27/21 12:10	09/28/21 15:32	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	09/27/21 12:10	09/28/21 15:32	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	09/27/21 12:10	09/28/21 15:32	7440-28-0	
7470 Mercury									
Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA									
Mercury	ND	mg/L	0.00020	0.000078	1	09/28/21 11:00	09/28/21 19:25	7439-97-6	
2540C Total Dissolved Solids									
Analytical Method: SM 2540C-2011 Pace Analytical Services - Peachtree Corners, GA									
Total Dissolved Solids	282	mg/L	10.0	10.0	1		09/23/21 20:01		
300.0 IC Anions 28 Days									
Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville									
Chloride	7.9	mg/L	1.0	0.60	1		09/21/21 16:30	16887-00-6	
Fluoride	0.069J	mg/L	0.10	0.050	1		09/21/21 16:30	16984-48-8	
Sulfate	101	mg/L	2.0	1.0	2		09/22/21 04:40	14808-79-8	

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ANALYTICAL RESULTS

Project: MCDONOUGH AP-1
Pace Project No.: 92561303

Sample: DGWC-68A		Lab ID: 92561303007		Collected: 09/16/21 14:16		Received: 09/17/21 17:06		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data									
Analytical Method: Pace Analytical Services - Charlotte									
Performed by	CUSTOMER				1		09/20/21 14:47		
pH	6.79	Std. Units			1		09/20/21 14:47		
6010D ATL ICP									
Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA									
Calcium	60.6	mg/L	1.0	0.12	1	09/29/21 10:10	09/29/21 18:46	7440-70-2	
6020 MET ICPMS									
Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA									
Antimony	ND	mg/L	0.0030	0.00078	1	09/27/21 12:10	09/28/21 15:38	7440-36-0	
Arsenic	0.46	mg/L	0.0050	0.0011	1	09/27/21 12:10	09/28/21 15:38	7440-38-2	
Barium	0.13	mg/L	0.0050	0.00067	1	09/27/21 12:10	09/28/21 15:38	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	09/27/21 12:10	09/28/21 15:38	7440-41-7	
Boron	1.3	mg/L	0.040	0.0086	1	09/27/21 12:10	09/28/21 15:38	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	09/27/21 12:10	09/28/21 15:38	7440-43-9	
Chromium	0.0014J	mg/L	0.0050	0.0011	1	09/27/21 12:10	09/28/21 15:38	7440-47-3	
Cobalt	0.0032J	mg/L	0.0050	0.00039	1	09/27/21 12:10	09/28/21 15:38	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	09/27/21 12:10	09/28/21 15:38	7439-92-1	
Lithium	0.00082J	mg/L	0.030	0.00073	1	09/27/21 12:10	09/28/21 15:38	7439-93-2	
Molybdenum	0.18	mg/L	0.010	0.00074	1	09/27/21 12:10	09/28/21 15:38	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	09/27/21 12:10	09/28/21 15:38	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	09/27/21 12:10	09/28/21 15:38	7440-28-0	
7470 Mercury									
Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA									
Mercury	ND	mg/L	0.00020	0.000078	1	09/28/21 11:00	09/28/21 19:28	7439-97-6	
2540C Total Dissolved Solids									
Analytical Method: SM 2540C-2011 Pace Analytical Services - Peachtree Corners, GA									
Total Dissolved Solids	259	mg/L	10.0	10.0	1		09/23/21 20:01		
300.0 IC Anions 28 Days									
Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville									
Chloride	3.4	mg/L	1.0	0.60	1		09/21/21 17:16	16887-00-6	
Fluoride	0.55	mg/L	0.10	0.050	1		09/21/21 17:16	16984-48-8	
Sulfate	22.3	mg/L	1.0	0.50	1		09/21/21 17:16	14808-79-8	

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ANALYTICAL RESULTS

Project: MCDONOUGH AP-1
Pace Project No.: 92561303

Sample: DGWC-69		Lab ID: 92561303008		Collected: 09/16/21 10:35		Received: 09/17/21 17:06		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data									
Analytical Method: Pace Analytical Services - Charlotte									
Performed by	CUSTOMER				1		09/20/21 14:47		
pH	6.16	Std. Units			1		09/20/21 14:47		
6010D ATL ICP									
Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA									
Calcium	18.0	mg/L	1.0	0.12	1	09/29/21 10:10	09/29/21 19:00	7440-70-2	
6020 MET ICPMS									
Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA									
Antimony	ND	mg/L	0.0030	0.00078	1	09/27/21 12:10	09/28/21 15:44	7440-36-0	
Arsenic	0.023	mg/L	0.0050	0.0011	1	09/27/21 12:10	09/28/21 15:44	7440-38-2	
Barium	0.078	mg/L	0.0050	0.00067	1	09/27/21 12:10	09/28/21 15:44	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	09/27/21 12:10	09/28/21 15:44	7440-41-7	
Boron	0.32	mg/L	0.040	0.0086	1	09/27/21 12:10	09/28/21 15:44	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	09/27/21 12:10	09/28/21 15:44	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	09/27/21 12:10	09/28/21 15:44	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00039	1	09/27/21 12:10	09/28/21 15:44	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	09/27/21 12:10	09/28/21 15:44	7439-92-1	
Lithium	0.0023J	mg/L	0.030	0.00073	1	09/27/21 12:10	09/28/21 15:44	7439-93-2	
Molybdenum	0.0090J	mg/L	0.010	0.00074	1	09/27/21 12:10	09/28/21 15:44	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	09/27/21 12:10	09/28/21 15:44	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	09/27/21 12:10	09/28/21 15:44	7440-28-0	
7470 Mercury									
Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA									
Mercury	ND	mg/L	0.00020	0.000078	1	09/28/21 11:00	09/28/21 19:30	7439-97-6	
2540C Total Dissolved Solids									
Analytical Method: SM 2540C-2011 Pace Analytical Services - Peachtree Corners, GA									
Total Dissolved Solids	113	mg/L	10.0	10.0	1		09/23/21 20:02		D6
300.0 IC Anions 28 Days									
Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville									
Chloride	4.5	mg/L	1.0	0.60	1		09/21/21 17:32	16887-00-6	
Fluoride	0.11	mg/L	0.10	0.050	1		09/21/21 17:32	16984-48-8	
Sulfate	17.9	mg/L	1.0	0.50	1		09/21/21 17:32	14808-79-8	

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ANALYTICAL RESULTS

Project: MCDONOUGH AP-1
Pace Project No.: 92561303

Sample: DUP-6		Lab ID: 92561303009		Collected: 09/16/21 00:00		Received: 09/17/21 17:06		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010D ATL ICP		Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA							
Calcium	18.4	mg/L	1.0	0.12	1	09/29/21 10:10	09/29/21 19:05	7440-70-2	
6020 MET ICPMS		Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA							
Antimony	ND	mg/L	0.0030	0.00078	1	09/27/21 12:10	09/28/21 15:49	7440-36-0	
Arsenic	0.023	mg/L	0.0050	0.0011	1	09/27/21 12:10	09/28/21 15:49	7440-38-2	
Barium	0.083	mg/L	0.0050	0.00067	1	09/27/21 12:10	09/28/21 15:49	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	09/27/21 12:10	09/28/21 15:49	7440-41-7	
Boron	0.34	mg/L	0.040	0.0086	1	09/27/21 12:10	09/28/21 15:49	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	09/27/21 12:10	09/28/21 15:49	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	09/27/21 12:10	09/28/21 15:49	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00039	1	09/27/21 12:10	09/28/21 15:49	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	09/27/21 12:10	09/28/21 15:49	7439-92-1	
Lithium	0.0025J	mg/L	0.030	0.00073	1	09/27/21 12:10	09/28/21 15:49	7439-93-2	
Molybdenum	0.0093J	mg/L	0.010	0.00074	1	09/27/21 12:10	09/28/21 15:49	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	09/27/21 12:10	09/28/21 15:49	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	09/27/21 12:10	09/28/21 15:49	7440-28-0	
7470 Mercury		Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA							
Mercury	ND	mg/L	0.00020	0.000078	1	09/28/21 11:00	09/28/21 19:38	7439-97-6	
2540C Total Dissolved Solids		Analytical Method: SM 2540C-2011 Pace Analytical Services - Peachtree Corners, GA							
Total Dissolved Solids	117	mg/L	10.0	10.0	1		09/23/21 20:02		
300.0 IC Anions 28 Days		Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville							
Chloride	4.4	mg/L	1.0	0.60	1		09/21/21 17:47	16887-00-6	
Fluoride	0.11	mg/L	0.10	0.050	1		09/21/21 17:47	16984-48-8	
Sulfate	18.0	mg/L	1.0	0.50	1		09/21/21 17:47	14808-79-8	

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QUALITY CONTROL DATA

Project: MCDONOUGH AP-1
Pace Project No.: 92561303

QC Batch: 649648 Analysis Method: EPA 6010D
QC Batch Method: EPA 3010A Analysis Description: 6010D ATL
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92561303001, 92561303002, 92561303003, 92561303004, 92561303005, 92561303006, 92561303007, 92561303008, 92561303009

METHOD BLANK: 3407003 Matrix: Water
Associated Lab Samples: 92561303001, 92561303002, 92561303003, 92561303004, 92561303005, 92561303006, 92561303007, 92561303008, 92561303009

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Calcium	mg/L	ND	1.0	0.12	09/29/21 16:41	

LABORATORY CONTROL SAMPLE: 3407004

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Calcium	mg/L	1	1.1	113	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3407005 3407006

Parameter	Units	MS		MSD		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		92561303001 Result	Spike Conc.	Spike Conc.	Result						
Calcium	mg/L	45.1	1	1	46.7	46.4	160	129	75-125	1	20 M1

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

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QUALITY CONTROL DATA

Project: MCDONOUGH AP-1
Pace Project No.: 92561303

QC Batch: 649183 Analysis Method: EPA 6020B
QC Batch Method: EPA 3005A Analysis Description: 6020 MET
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92561303001, 92561303002, 92561303003

METHOD BLANK: 3405029 Matrix: Water
Associated Lab Samples: 92561303001, 92561303002, 92561303003

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	mg/L	ND	0.0030	0.00078	09/24/21 15:43	
Arsenic	mg/L	ND	0.0050	0.0011	09/24/21 15:43	
Barium	mg/L	ND	0.0050	0.00067	09/24/21 15:43	
Beryllium	mg/L	ND	0.00050	0.000054	09/24/21 15:43	
Boron	mg/L	ND	0.040	0.0086	09/24/21 15:43	
Cadmium	mg/L	ND	0.00050	0.00011	09/24/21 15:43	
Chromium	mg/L	ND	0.0050	0.0011	09/24/21 15:43	
Cobalt	mg/L	ND	0.0050	0.00039	09/24/21 15:43	
Lead	mg/L	ND	0.0010	0.00089	09/24/21 15:43	
Lithium	mg/L	ND	0.030	0.00073	09/24/21 15:43	
Molybdenum	mg/L	ND	0.010	0.00074	09/24/21 15:43	
Selenium	mg/L	ND	0.0050	0.0014	09/24/21 15:43	
Thallium	mg/L	ND	0.0010	0.00018	09/24/21 15:43	

LABORATORY CONTROL SAMPLE: 3405030

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	mg/L	0.1	0.10	102	80-120	
Arsenic	mg/L	0.1	0.095	95	80-120	
Barium	mg/L	0.1	0.097	97	80-120	
Beryllium	mg/L	0.1	0.10	102	80-120	
Boron	mg/L	1	1.0	103	80-120	
Cadmium	mg/L	0.1	0.10	103	80-120	
Chromium	mg/L	0.1	0.10	102	80-120	
Cobalt	mg/L	0.1	0.10	103	80-120	
Lead	mg/L	0.1	0.099	99	80-120	
Lithium	mg/L	0.1	0.10	101	80-120	
Molybdenum	mg/L	0.1	0.099	99	80-120	
Selenium	mg/L	0.1	0.094	94	80-120	
Thallium	mg/L	0.1	0.098	98	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3405031 3405032

Parameter	Units	92560768019 Result	MS		MSD		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
			Spike Conc.	MSD Spike Conc.	MS Result	MSD Result						
Antimony	mg/L	ND	0.1	0.1	0.10	0.10	103	102	75-125	1	20	
Arsenic	mg/L	0.0018J	0.1	0.1	0.098	0.098	96	96	75-125	0	20	

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QUALITY CONTROL DATA

Project: MCDONOUGH AP-1

Pace Project No.: 92561303

Parameter	Units	3405031		3405032		MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		92560768019 Result	MS Spike Conc.	MSD Spike Conc.	MS Result								
Barium	mg/L	0.016	0.1	0.1	0.12	0.12	105	104	75-125	1	20		
Beryllium	mg/L	0.011	0.1	0.1	0.094	0.092	82	80	75-125	2	20		
Boron	mg/L	0.61	1	1	1.4	1.4	83	77	75-125	4	20		
Cadmium	mg/L	0.00035J	0.1	0.1	0.10	0.10	100	101	75-125	1	20		
Chromium	mg/L	ND	0.1	0.1	0.098	0.097	98	97	75-125	1	20		
Cobalt	mg/L	0.28	0.1	0.1	0.37	0.36	91	82	75-125	2	20		
Lead	mg/L	ND	0.1	0.1	0.092	0.094	92	94	75-125	3	20		
Lithium	mg/L	0.085	0.1	0.1	0.16	0.16	78	72	75-125	4	20	M1	
Molybdenum	mg/L	ND	0.1	0.1	0.10	0.10	100	101	75-125	1	20		
Selenium	mg/L	0.0041J	0.1	0.1	0.10	0.099	96	95	75-125	1	20		
Thallium	mg/L	ND	0.1	0.1	0.094	0.095	94	95	75-125	1	20		

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QUALITY CONTROL DATA

Project: MCDONOUGH AP-1
Pace Project No.: 92561303

QC Batch: 649484 Analysis Method: EPA 6020B
QC Batch Method: EPA 3005A Analysis Description: 6020 MET
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92561303004, 92561303005, 92561303006, 92561303007, 92561303008, 92561303009

METHOD BLANK: 3406420 Matrix: Water
Associated Lab Samples: 92561303004, 92561303005, 92561303006, 92561303007, 92561303008, 92561303009

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	mg/L	ND	0.0030	0.00078	09/28/21 15:09	
Arsenic	mg/L	ND	0.0050	0.0011	09/28/21 15:09	
Barium	mg/L	ND	0.0050	0.00067	09/28/21 15:09	
Beryllium	mg/L	ND	0.00050	0.000054	09/28/21 15:09	
Boron	mg/L	ND	0.040	0.0086	09/28/21 15:09	
Cadmium	mg/L	ND	0.00050	0.00011	09/28/21 15:09	
Chromium	mg/L	ND	0.0050	0.0011	09/28/21 15:09	
Cobalt	mg/L	ND	0.0050	0.00039	09/28/21 15:09	
Lead	mg/L	ND	0.0010	0.00089	09/28/21 15:09	
Lithium	mg/L	ND	0.030	0.00073	09/28/21 15:09	
Molybdenum	mg/L	ND	0.010	0.00074	09/28/21 15:09	
Selenium	mg/L	ND	0.0050	0.0014	09/28/21 15:09	
Thallium	mg/L	ND	0.0010	0.00018	09/28/21 15:09	

LABORATORY CONTROL SAMPLE: 3406421

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	mg/L	0.1	0.096	96	80-120	
Arsenic	mg/L	0.1	0.097	97	80-120	
Barium	mg/L	0.1	0.093	93	80-120	
Beryllium	mg/L	0.1	0.092	92	80-120	
Boron	mg/L	1	0.95	95	80-120	
Cadmium	mg/L	0.1	0.10	100	80-120	
Chromium	mg/L	0.1	0.10	101	80-120	
Cobalt	mg/L	0.1	0.10	100	80-120	
Lead	mg/L	0.1	0.093	93	80-120	
Lithium	mg/L	0.1	0.094	94	80-120	
Molybdenum	mg/L	0.1	0.096	96	80-120	
Selenium	mg/L	0.1	0.098	98	80-120	
Thallium	mg/L	0.1	0.093	93	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3406422 3406423

Parameter	Units	92562762002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Antimony	mg/L	ND	0.1	0.1	0.099	0.10	99	100	75-125	1	20	
Arsenic	mg/L	ND	0.1	0.1	0.098	0.10	98	101	75-125	3	20	

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QUALITY CONTROL DATA

Project: MCDONOUGH AP-1

Pace Project No.: 92561303

Parameter	Units	92562762002		3406422		3406423		% Rec	% Rec	% Rec	Limits	RPD	Max RPD	Qual
		Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec							
Barium	mg/L	138 ug/L	0.1	0.1	0.23	0.24	94	105	75-125	4	20			
Beryllium	mg/L	ND	0.1	0.1	0.092	0.093	92	93	75-125	1	20			
Boron	mg/L	163 ug/L	1	1	1.1	1.1	97	98	75-125	1	20			
Cadmium	mg/L	ND	0.1	0.1	0.099	0.10	99	100	75-125	1	20			
Chromium	mg/L	ND	0.1	0.1	0.099	0.10	98	101	75-125	3	20			
Cobalt	mg/L	ND	0.1	0.1	0.096	0.099	96	99	75-125	3	20			
Lead	mg/L	ND	0.1	0.1	0.089	0.088	89	88	75-125	1	20			
Lithium	mg/L	ND	0.1	0.1	0.098	0.10	93	95	75-125	2	20			
Molybdenum	mg/L	ND	0.1	0.1	0.11	0.10	102	102	75-125	0	20			
Selenium	mg/L	ND	0.1	0.1	0.098	0.10	98	100	75-125	3	20			
Thallium	mg/L	ND	0.1	0.1	0.090	0.090	90	90	75-125	0	20			

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QUALITY CONTROL DATA

Project: MCDONOUGH AP-1
Pace Project No.: 92561303

QC Batch:	649667	Analysis Method:	EPA 7470A
QC Batch Method:	EPA 7470A	Analysis Description:	7470 Mercury
		Laboratory:	Pace Analytical Services - Peachtree Corners, GA

Associated Lab Samples: 92561303001, 92561303002, 92561303003, 92561303004, 92561303005, 92561303006, 92561303007, 92561303008, 92561303009

METHOD BLANK: 3407093 Matrix: Water
Associated Lab Samples: 92561303001, 92561303002, 92561303003, 92561303004, 92561303005, 92561303006, 92561303007, 92561303008, 92561303009

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	mg/L	ND	0.00020	0.000078	09/28/21 18:20	

LABORATORY CONTROL SAMPLE: 3407094

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	mg/L	0.0025	0.0025	101	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3407095 3407096

Parameter	Units	92560768022 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Mercury	mg/L	ND	0.0025	0.0025	0.0026	0.0027	103	107	75-125	4	20	

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QUALITY CONTROL DATA

Project: MCDONOUGH AP-1

Pace Project No.: 92561303

QC Batch: 648469	Analysis Method: SM 2540C-2011
QC Batch Method: SM 2540C-2011	Analysis Description: 2540C Total Dissolved Solids
	Laboratory: Pace Analytical Services - Peachtree Corners, GA

Associated Lab Samples: 92561303001, 92561303002

METHOD BLANK: 3400861 Matrix: Water

Associated Lab Samples: 92561303001, 92561303002

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	ND	10.0	10.0	09/21/21 12:32	

LABORATORY CONTROL SAMPLE: 3400862

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	400	392	98	90-111	

SAMPLE DUPLICATE: 3400863

Parameter	Units	92561295001 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	788	808	3	10	

SAMPLE DUPLICATE: 3400864

Parameter	Units	92560768020 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	882	916	4	10	

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QUALITY CONTROL DATA

Project: MCDONOUGH AP-1
Pace Project No.: 92561303

QC Batch: 648470	Analysis Method: SM 2540C-2011
QC Batch Method: SM 2540C-2011	Analysis Description: 2540C Total Dissolved Solids
	Laboratory: Pace Analytical Services - Peachtree Corners, GA

Associated Lab Samples: 92561303003

METHOD BLANK: 3400865 Matrix: Water
Associated Lab Samples: 92561303003

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	ND	10.0	10.0	09/21/21 19:07	

LABORATORY CONTROL SAMPLE: 3400866

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	400	400	100	90-111	

SAMPLE DUPLICATE: 3400867

Parameter	Units	92562042001 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	78.0	74.0	5	10	

SAMPLE DUPLICATE: 3400868

Parameter	Units	92560768028 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	ND	ND		10	

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QUALITY CONTROL DATA

Project: MCDONOUGH AP-1

Pace Project No.: 92561303

QC Batch: 649122	Analysis Method: SM 2540C-2011
QC Batch Method: SM 2540C-2011	Analysis Description: 2540C Total Dissolved Solids
	Laboratory: Pace Analytical Services - Peachtree Corners, GA

Associated Lab Samples: 92561303004, 92561303005, 92561303006, 92561303007, 92561303008, 92561303009

METHOD BLANK: 3404908 Matrix: Water
Associated Lab Samples: 92561303004, 92561303005, 92561303006, 92561303007, 92561303008, 92561303009

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	ND	10.0	10.0	09/23/21 20:00	

LABORATORY CONTROL SAMPLE: 3404909

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	400	397	99	90-111	

SAMPLE DUPLICATE: 3404910

Parameter	Units	92562006012 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	644	678	5	10	

SAMPLE DUPLICATE: 3404911

Parameter	Units	92561303008 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	113	127	12	10	D6

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QUALITY CONTROL DATA

Project: MCDONOUGH AP-1

Pace Project No.: 92561303

QC Batch: 647837	Analysis Method: EPA 300.0 Rev 2.1 1993
QC Batch Method: EPA 300.0 Rev 2.1 1993	Analysis Description: 300.0 IC Anions
	Laboratory: Pace Analytical Services - Asheville

Associated Lab Samples: 92561303001, 92561303002

METHOD BLANK: 3398284 Matrix: Water

Associated Lab Samples: 92561303001, 92561303002

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	0.60	09/17/21 05:43	
Fluoride	mg/L	ND	0.10	0.050	09/17/21 05:43	
Sulfate	mg/L	ND	1.0	0.50	09/17/21 05:43	

LABORATORY CONTROL SAMPLE: 3398285

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	50	49.3	99	90-110	
Fluoride	mg/L	2.5	2.3	93	90-110	
Sulfate	mg/L	50	50.0	100	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3398286 3398287

Parameter	Units	MS		MSD		MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		92560768022 Result	Spike Conc.	Spike Conc.	Result								
Chloride	mg/L	ND	50	50	59.2	60.1	118	120	90-110	2	10	M1	
Fluoride	mg/L	ND	2.5	2.5	2.9	2.9	115	115	90-110	0	10	M1	
Sulfate	mg/L	ND	50	50	59.8	60.7	119	121	90-110	2	10	M1	

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QUALITY CONTROL DATA

Project: MCDONOUGH AP-1
Pace Project No.: 92561303

QC Batch: 647979 Analysis Method: EPA 300.0 Rev 2.1 1993
QC Batch Method: EPA 300.0 Rev 2.1 1993 Analysis Description: 300.0 IC Anions
Laboratory: Pace Analytical Services - Asheville

Associated Lab Samples: 92561303003

METHOD BLANK: 3398609 Matrix: Water
Associated Lab Samples: 92561303003

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	0.60	09/17/21 23:38	
Fluoride	mg/L	ND	0.10	0.050	09/17/21 23:38	
Sulfate	mg/L	ND	1.0	0.50	09/17/21 23:38	

LABORATORY CONTROL SAMPLE: 3398610

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	50	48.7	97	90-110	
Fluoride	mg/L	2.5	2.5	99	90-110	
Sulfate	mg/L	50	52.1	104	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3398611 3398612

Parameter	Units	92561816013		MS		MSD		% Rec	% Rec	% Rec Limits	RPD	Max RPD	Qual
		Result	Conc.	Spike Conc.	Spike Conc.	Result	Result						
Chloride	mg/L	11900	50	50	12800	13000	1830	2190	90-110	1	10	M1	
Fluoride	mg/L	3.6	2.5	2.5	4.3	21.0	29	698	90-110	132	10	M1, R1	
Sulfate	mg/L	8660	50	50	9380	9600	1430	1880	90-110	2	10	M1	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3398613 3398614

Parameter	Units	92560768026		MS		MSD		% Rec	% Rec	% Rec Limits	RPD	Max RPD	Qual
		Result	Conc.	Spike Conc.	Spike Conc.	Result	Result						
Chloride	mg/L	29.9	50	50	65.4	66.1	71	72	90-110	1	10	M1	
Fluoride	mg/L	0.098J	2.5	2.5	2.8	2.8	109	109	90-110	0	10		
Sulfate	mg/L	325	50	50	365	368	81	86	90-110	1	10	M1	

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QUALITY CONTROL DATA

Project: MCDONOUGH AP-1
Pace Project No.: 92561303

QC Batch: 648429 Analysis Method: EPA 300.0 Rev 2.1 1993
QC Batch Method: EPA 300.0 Rev 2.1 1993 Analysis Description: 300.0 IC Anions
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 92561303004, 92561303005, 92561303006, 92561303007, 92561303008, 92561303009

METHOD BLANK: 3400731 Matrix: Water
Associated Lab Samples: 92561303004, 92561303005, 92561303006, 92561303007, 92561303008, 92561303009

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	0.60	09/21/21 14:57	
Fluoride	mg/L	ND	0.10	0.050	09/21/21 14:57	
Sulfate	mg/L	ND	1.0	0.50	09/21/21 14:57	

LABORATORY CONTROL SAMPLE: 3400732

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	50	51.1	102	90-110	
Fluoride	mg/L	2.5	2.5	99	90-110	
Sulfate	mg/L	50	52.2	104	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3400733 3400734

Parameter	Units	MS		MSD		MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		92561303004	Result	Spike Conc.	Spike Conc.								
Chloride	mg/L	5.6	50	50	56.6	56.8	102	103	90-110	0	10		
Fluoride	mg/L	0.084J	2.5	2.5	3.0	3.0	118	118	90-110	0	10	M1	
Sulfate	mg/L	95.0	50	50	129	129	67	68	90-110	0	10	M1	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3400735 3400736

Parameter	Units	MS		MSD		MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		92561637004	Result	Spike Conc.	Spike Conc.								
Chloride	mg/L	ND	50	50	50.3	50.7	101	101	90-110	1	10		
Fluoride	mg/L	ND	2.5	2.5	2.4	2.5	97	98	90-110	1	10		
Sulfate	mg/L	ND	50	50	52.1	52.5	104	105	90-110	1	10		

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QUALIFIERS

Project: MCDONOUGH AP-1

Pace Project No.: 92561303

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

Acid preservation may not be appropriate for 2 Chloroethylvinyl ether.

A separate vial preserved to a pH of 4-5 is recommended in SW846 Chapter 4 for the analysis of Acrolein and Acrylonitrile by EPA Method 8260.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Reported results are not rounded until the final step prior to reporting. Therefore, calculated parameters that are typically reported as "Total" may vary slightly from the sum of the reported component parameters.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

ANALYTE QUALIFIERS

D6 The precision between the sample and sample duplicate exceeded laboratory control limits.

M1 Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

R1 RPD value was outside control limits.

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: MCDONOUGH AP-1
Pace Project No.: 92561303

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92561303001	DGWC-40				
92561303003	DGWC-38				
92561303004	DGWC-37				
92561303005	DGWC-39				
92561303006	DGWC-67				
92561303007	DGWC-68A				
92561303008	DGWC-69				
92561303001	DGWC-40	EPA 3010A	649648	EPA 6010D	649927
92561303002	FB-4	EPA 3010A	649648	EPA 6010D	649927
92561303003	DGWC-38	EPA 3010A	649648	EPA 6010D	649927
92561303004	DGWC-37	EPA 3010A	649648	EPA 6010D	649927
92561303005	DGWC-39	EPA 3010A	649648	EPA 6010D	649927
92561303006	DGWC-67	EPA 3010A	649648	EPA 6010D	649927
92561303007	DGWC-68A	EPA 3010A	649648	EPA 6010D	649927
92561303008	DGWC-69	EPA 3010A	649648	EPA 6010D	649927
92561303009	DUP-6	EPA 3010A	649648	EPA 6010D	649927
92561303001	DGWC-40	EPA 3005A	649183	EPA 6020B	649262
92561303002	FB-4	EPA 3005A	649183	EPA 6020B	649262
92561303003	DGWC-38	EPA 3005A	649183	EPA 6020B	649262
92561303004	DGWC-37	EPA 3005A	649484	EPA 6020B	649562
92561303005	DGWC-39	EPA 3005A	649484	EPA 6020B	649562
92561303006	DGWC-67	EPA 3005A	649484	EPA 6020B	649562
92561303007	DGWC-68A	EPA 3005A	649484	EPA 6020B	649562
92561303008	DGWC-69	EPA 3005A	649484	EPA 6020B	649562
92561303009	DUP-6	EPA 3005A	649484	EPA 6020B	649562
92561303001	DGWC-40	EPA 7470A	649667	EPA 7470A	649675
92561303002	FB-4	EPA 7470A	649667	EPA 7470A	649675
92561303003	DGWC-38	EPA 7470A	649667	EPA 7470A	649675
92561303004	DGWC-37	EPA 7470A	649667	EPA 7470A	649675
92561303005	DGWC-39	EPA 7470A	649667	EPA 7470A	649675
92561303006	DGWC-67	EPA 7470A	649667	EPA 7470A	649675
92561303007	DGWC-68A	EPA 7470A	649667	EPA 7470A	649675
92561303008	DGWC-69	EPA 7470A	649667	EPA 7470A	649675
92561303009	DUP-6	EPA 7470A	649667	EPA 7470A	649675
92561303001	DGWC-40	SM 2540C-2011	648469		
92561303002	FB-4	SM 2540C-2011	648469		
92561303003	DGWC-38	SM 2540C-2011	648470		
92561303004	DGWC-37	SM 2540C-2011	649122		
92561303005	DGWC-39	SM 2540C-2011	649122		
92561303006	DGWC-67	SM 2540C-2011	649122		
92561303007	DGWC-68A	SM 2540C-2011	649122		
92561303008	DGWC-69	SM 2540C-2011	649122		
92561303009	DUP-6	SM 2540C-2011	649122		
92561303001	DGWC-40	EPA 300.0 Rev 2.1 1993	647837		
92561303002	FB-4	EPA 300.0 Rev 2.1 1993	647837		

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: MCDONOUGH AP-1

Pace Project No.: 92561303

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92561303003	DGWC-38	EPA 300.0 Rev 2.1 1993	647979		
92561303004	DGWC-37	EPA 300.0 Rev 2.1 1993	648429		
92561303005	DGWC-39	EPA 300.0 Rev 2.1 1993	648429		
92561303006	DGWC-67	EPA 300.0 Rev 2.1 1993	648429		
92561303007	DGWC-68A	EPA 300.0 Rev 2.1 1993	648429		
92561303008	DGWC-69	EPA 300.0 Rev 2.1 1993	648429		
92561303009	DUP-6	EPA 300.0 Rev 2.1 1993	648429		


REPORT OF LABORATORY ANALYSIS

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	Document Name: Sample Condition: Upon Receipt (SCUR)	Document Revised: October 28, 2020 Page 1 of 2
	Document No.: F-CAR-CS-033-Rev.07	Issuing Authority: Pace Carolinas Quality Office

Laboratory receiving samples:

Asheville Eden Greenwood Huntersville Raleigh Mechanicsville Atlanta Kernersville

Sample Condition Upon Receipt	Client Name: <u>CyD Power</u>	Project WO#: 92561303
Courier: <input checked="" type="checkbox"/> Commercial	<input type="checkbox"/> Fed Ex <input type="checkbox"/> UPS <input type="checkbox"/> USPS <input type="checkbox"/> Client <input type="checkbox"/> Pace <input type="checkbox"/> Other: _____	 92561303
Custody Seal Present?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	

Packing Material: Bubble Wrap Bubble Bags None Other

Thermometer: IR Gun ID: 083 White Blue None

Biological Tissue Frozen? Yes No N/A

Cooler Temp: 2.4 Correction Factor: ±0 Temp should be above freezing to 6°C

Cooler Temp Corrected (°C): 2.4 Samples out of temp criteria. Samples on ice, cooling process has begun

USDA Regulated Soil (N/A, water sample)

Did samples originate in a quarantine zone within the United States: CA, NY, or SC (check maps)? Yes No

Did samples originate from a foreign source (Internationally, including Hawaii and Puerto Rico)? Yes No

Chain of Custody Present?	Yes	No	N/A	1.
Chain of Custody Present?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1.
Samples Arrived within Hold Time?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2.
Short Hold Time Analysis (<72 hr.)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	3.
Rush Turn Around Time Requested?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	4. <u>10 Day TAT</u>
Sufficient Volume?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	5.
Correct Containers Used?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	6.
-Pace Containers Used?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Containers Intact?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	7.
Dissolved analysis: Samples Field Filtered?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	8.
Sample Labels Match COC?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	9.
-Includes Date/Time/ID/Analysis Matrix: <u>WT</u>				
Headspace in VOA Vials (>5-6mm)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	10.
Trip Blank Present?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	11.
Trip Blank Custody Seals Present?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	

COMMENTS/SAMPLE DISCREPANCY _____ Field Data Required? Yes No

Lot ID of split containers: _____

CLIENT NOTIFICATION/RESOLUTION _____

Person contacted: _____ Date/Time: _____

Project Manager SCURF Review: _____ Date: _____

Project Manager SRF Review: _____ Date: _____

CHAIN-OF-CUSTODY / Analytical Request Document

This Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Bohling

Section A Requested Client Information:
 Company: GEORJA Power - C&M Construction Resources
 Address: 2427 Mariner Road
 Alameda, CA 94538

Section B Requested Project Information:
 Report To: SU Aquatics
 Order To: Oyster
 Project Name: Palm Meadows AP 1
 Project # (optional):

Section C Analytical Information:
 Collection: 8/24/2021
 Company Name: GEORJA Power - C&M Construction Resources
 Address: 2427 Mariner Road, Alameda, CA 94538
 Project Manager: Kevin Hering
 Spec From: CA

Requester Due Date: 10 Day TAT

ITEM #	SAMPLE ID	MATRIX	DATE	TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	PRESERVATIVES					ANALYSIS TEST				Residual Chlorine (Y/N)		
							Unpreserved - Ice	H2SO4	HNO3 + Ice	HCl	HNO3 + Zn Acetate	H2SO4	Methanol	Other	App (IUV) Total Metals		Ca, F, SO4, TDS	Radium 226/228
1	DSVC-40	Water	9/15/21	18:30		5	2	3					X	X	X			
2	RB4	Water	9/15/21	18:15		5	2	3					X	X	X			
3																		
4																		
5																		
6																		
7																		
8																		
9																		
10																		
11																		
12																		
13																		
14																		

Requested by: M. GARCIA
 Date: 9-15-21
 Time: 9:30 AM
 Accepted by: M. BOHLING
 Date: 9-15-21
 Time: 8:30 AM

TEMP in c: _____
 Received on (Y/N): _____
 Cooled (Y/N): _____
 Samples Inlet (Y/N): _____

Laboratory receiving samples:

Asheville Eden Greenwood Huntersville Raleigh Mechanicsville Atlanta Kernersville

Sample Condition Upon Receipt	Client Name: <u>Georgia Power</u>	Project #:
-------------------------------	--------------------------------------	------------

Courier: Commercial Fed Ex UPS USPS Client Pace Other: _____

Custody Seal Present? Yes No Seals Intact? Yes No

Date/Initials Person Examining Contents: MT 9/16/21

Packing Material: Bubble Wrap Bubble Bags None Other

Biological Tissue Frozen? Yes No N/A

Thermometer: IR Gun ID: 214 Type of Ice: Wet Blue None

Cooler Temp: 3.2 Correction Factor: +0.1 Add/Subtract (°C)

Temp should be above freezing to 6°C
 Samples out of temp criteria. Samples on ice, cooling process has begun

Cooler Temp Corrected (°C): 3.1

USDA Regulated Soil (N/A, water sample)

Did samples originate in a quarantine zone within the United States: CA, NY, or SC (check maps)? Yes No

Did samples originate from a foreign source (internationally, including Hawaii and Puerto Rico)? Yes No

	Comments/Discrepancy:
Chain of Custody Present? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	1.
Samples Arrived within Hold Time? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	2.
Short Hold Time Analysis (<72 hr.)? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	3.
Rush Turn Around Time Requested? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	4.
Sufficient Volume? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	5.
Correct Containers Used? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	6.
Pace Containers Used? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Containers Intact? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	7.
Dissolved analysis: Samples Field Filtered? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	8.
Sample Labels Match CDC? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	9.
Includes Date/Time/ID/Analysis Matrix: <u>WT</u>	
Headspace in VOA Vials (>5.6mm)? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	10.
Trip Blank Present? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	11.
Trip Blank Custody Seals Present? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	

COMMENTS/SAMPLE DISCREPANCY

Field Data Required? Yes No

Lot ID of split containers:

CLIENT NOTIFICATION/RESOLUTION

Person contacted: _____ Date/Time: _____

Project Manager SCUR Review: _____ Date: _____

Project Manager SRF Review: _____ Date: _____

2

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Section A: Client Information
Section B: Requested Project Information
Section C: Analytical Information

Client Name: Example Power - Coal Combustion Residuals	Project To: 556 Alachua	Address: 3400 Sevier Road	City: Sevier, GA 30084
Client Contact: Example Power	Project Name: Example Power	Project Manager: Example Power	Project Phone: 706 555 1234
Client Email: example@power.com	Project # (Internal): 10123456	Project Phone #:	Project Fax #:
Client Date: 10/17/11	Requested Analysis: As Requested	Requested Analysis: As Requested	Requested Analysis: As Requested

DATE	TIME	SAMPLE TEMP AT COLLECTION	NO OF CONTAINERS	PRESERVATION					ANALYSIS TEST					RESIDUAL CHLORIDE (Y/N)	PH ± 0.05	
				H2SO4	HNO3 + Ice	HCl	NaOH + Zn Acetate	H2SO4	Methanol	Other	App In/IV Total Metals	Cl, F, SO4, TDS	Radon			226/228
0																
1																
2																
3																
4																

DATE	TIME	ACQUIRED BY / ORGANIZATION	DATE	TIME	ANALYSIS CONDITION
7-16-11	08:23	M. BATH	9-16-11	08:00	Y
9-16-11	09:05	M. BATH	9-16-11	08:06	N
					Y

TEMP in C: _____

Received on: _____ (Y/N)

Curbby Sealed Cooler: _____ (Y/N)

Samples intact: _____ (Y/N)

DATE Signed: **9-16-11**

Signature: *John Jones*



Document Name:
Sample Condition Upon Receipt (SCUR)
Document No.:
F-CAR-CS-033-Rev.07

Document Revised: October 28, 2020
Page 1 of 2
Issuing Authority:
Pace Carolinas Quality Office

Laboratory receiving samples:

Asheville Eden Greenwood Huntersville Raleigh Mechanicsville Atlanta Kernersville

Sample Condition Upon Receipt

Client Name:

G A Power

Project #:

Courier: Fed Ex UPS USPS Client
 Commercial Pace Other: _____

Custody Seal Present? Yes No Seals Intact? Yes No

Date/Initials Person Examining Contents: 9/17/20
CO4

Packing Material: Bubble Wrap Bubble Bags None Other

Biological Tissue Frozen? Yes No N/A

Thermometer: IR Gun ID: 083 Type of ice: Wet Blue None

Cooler Temp: 2.0 Correction Factor: Add/Subtract (°C) 0.0

Temp should be above freezing to 6°C
 Samples out of temp criteria. Samples on ice, cooling process has begun

Cooler Temp Corrected (°C): 2.0

USDA Regulated Soil (N/A, water sample)

Did samples originate in a quarantine zone within the United States: CA, NY, or SC (check maps)? Yes No

Did samples originate from a foreign source (internationally, including Hawaii and Puerto Rico)? Yes No

	Comments/Discrepancy:
Chain of Custody Present? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	1.
Samples Arrived within Hold Time? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	2.
Short Hold Time Analysis (<72 hr.)? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	3.
Rush Turn Around Time Requested? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	4.
Sufficient Volume? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	5.
Correct Containers Used? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	6.
-Pace Containers Used? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Containers Intact? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	7.
Dissolved analysis: Samples Field Filtered? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	8.
Sample Labels Match COC? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	9.
-Includes Date/Time/ID/Analysis Matrix: <u>W</u>	
Headspace in VOA Vials (>5-6mm)? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	10.
Trip Blank Present? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	11.
Trip Blank Custody Seals Present? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	

COMMENTS/SAMPLE DISCREPANCY

Field Date Required? Yes No

Lot ID of split containers:

CLIENT NOTIFICATION/RESOLUTION

Person contacted: _____ Date/Time: _____

Project Manager SCURF Review: _____ Date: _____

Project Manager SHF Review: _____ Date: _____

October 29, 2021

Joju Abraham
Georgia Power-CCR
2480 Maner Road
Atlanta, GA 30339

RE: Project: MCDONOUGH AP-1 RADS
Pace Project No.: 92561311

Dear Joju Abraham:

Enclosed are the analytical results for sample(s) received by the laboratory between September 15, 2021 and September 17, 2021. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

- Pace Analytical Services - Greensburg

If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Nicole D'Oleo
nicole.d'oleo@pacelabs.com
(704)875-9092
Project Manager

Enclosures

cc: Stephen Benda
Daniela Herrera, Golder
Ben Hodges, Georgia Power
Kristen Jurinko
J. Shelby Mobley
Charles Norton, Southern Company
Ms. Lauren Petty, Southern Company
Dawn Prell, Golder Associates Inc.
Tim Richards, Golder Associates - Atlanta



REPORT OF LABORATORY ANALYSIS

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CERTIFICATIONS

Project: MCDONOUGH AP-1 RADS
Pace Project No.: 92561311

Pace Analytical Services Pennsylvania

1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601
ANAB DOD-ELAP Rad Accreditation #: L2417
Alabama Certification #: 41590
Arizona Certification #: AZ0734
Arkansas Certification
California Certification #: 04222CA
Colorado Certification #: PA01547
Connecticut Certification #: PH-0694
Delaware Certification
EPA Region 4 DW Rad
Florida/TNI Certification #: E87683
Georgia Certification #: C040
Florida: Cert E871149 SEKS WET
Guam Certification
Hawaii Certification
Idaho Certification
Illinois Certification
Indiana Certification
Iowa Certification #: 391
Kansas/TNI Certification #: E-10358
Kentucky Certification #: KY90133
KY WW Permit #: KY0098221
KY WW Permit #: KY0000221
Louisiana DHH/TNI Certification #: LA180012
Louisiana DEQ/TNI Certification #: 4086
Maine Certification #: 2017020
Maryland Certification #: 308
Massachusetts Certification #: M-PA1457
Michigan/PADEP Certification #: 9991

Missouri Certification #: 235
Montana Certification #: Cert0082
Nebraska Certification #: NE-OS-29-14
Nevada Certification #: PA014572018-1
New Hampshire/TNI Certification #: 297617
New Jersey/TNI Certification #: PA051
New Mexico Certification #: PA01457
New York/TNI Certification #: 10888
North Carolina Certification #: 42706
North Dakota Certification #: R-190
Ohio EPA Rad Approval: #41249
Oregon/TNI Certification #: PA200002-010
Pennsylvania/TNI Certification #: 65-00282
Puerto Rico Certification #: PA01457
Rhode Island Certification #: 65-00282
South Dakota Certification
Tennessee Certification #: 02867
Texas/TNI Certification #: T104704188-17-3
Utah/TNI Certification #: PA014572017-9
USDA Soil Permit #: P330-17-00091
Vermont Dept. of Health: ID# VT-0282
Virgin Island/PADEP Certification
Virginia/VELAP Certification #: 9526
Washington Certification #: C868
West Virginia DEP Certification #: 143
West Virginia DHHR Certification #: 9964C
Wisconsin Approve List for Rad
Wyoming Certification #: 8TMS-L

REPORT OF LABORATORY ANALYSIS

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SAMPLE SUMMARY

Project: MCDONOUGH AP-1 RADS

Pace Project No.: 92561311

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92561311001	DGWC-40	Water	09/14/21 16:30	09/15/21 09:34
92561311002	FB-4	Water	09/14/21 16:15	09/15/21 09:34
92561311003	DGWC-38	Water	09/15/21 15:45	09/16/21 09:06
92561311004	DGWC-37	Water	09/16/21 16:50	09/17/21 17:06
92561311005	DGWC-39	Water	09/17/21 10:30	09/17/21 17:06
92561311006	DGWC-67	Water	09/16/21 15:00	09/17/21 17:06
92561311007	DGWC-68A	Water	09/16/21 14:16	09/17/21 17:06
92561311008	DGWC-69	Water	09/16/21 10:35	09/17/21 17:06
92561311009	DUP-6	Water	09/16/21 00:00	09/17/21 17:06

REPORT OF LABORATORY ANALYSIS

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SAMPLE ANALYTE COUNT

Project: MCDONOUGH AP-1 RADS
Pace Project No.: 92561311

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
92561311001	DGWC-40	EPA 9315	CLA	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92561311002	FB-4	EPA 9315	CLA	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92561311003	DGWC-38	EPA 9315	CLA	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92561311004	DGWC-37	EPA 9315	JJY	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92561311005	DGWC-39	EPA 9315	JJY	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92561311006	DGWC-67	EPA 9315	JJY	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92561311007	DGWC-68A	EPA 9315	JJY	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92561311008	DGWC-69	EPA 9315	JJY	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92561311009	DUP-6	EPA 9315	JJY	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA

PASI-PA = Pace Analytical Services - Greensburg

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: MCDONOUGH AP-1 RADS

Pace Project No.: 92561311

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Sample: DGWC-40 Lab ID: 92561311001 Collected: 09/14/21 16:30 Received: 09/15/21 09:34 Matrix: Water PWS: Site ID: Sample Type:						
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	0.192 ± 0.212 (0.437) C:99% T:NA	pCi/L	10/07/21 08:25	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	1.61 ± 0.531 (0.739) C:75% T:89%	pCi/L	10/06/21 11:18	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	1.80 ± 0.743 (1.18)	pCi/L	10/07/21 15:35	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: MCDONOUGH AP-1 RADS

Pace Project No.: 92561311

Sample: FB-4 **Lab ID: 92561311002** Collected: 09/14/21 16:15 Received: 09/15/21 09:34 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Pace Analytical Services - Greensburg						
Radium-226	EPA 9315	0.0174 ± 0.191 (0.494) C:89% T:NA	pCi/L	10/07/21 08:25	13982-63-3	
Pace Analytical Services - Greensburg						
Radium-228	EPA 9320	0.887 ± 0.454 (0.802) C:65% T:86%	pCi/L	10/06/21 11:18	15262-20-1	
Pace Analytical Services - Greensburg						
Total Radium	Total Radium Calculation	0.904 ± 0.645 (1.30)	pCi/L	10/07/21 15:35	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: MCDONOUGH AP-1 RADS

Pace Project No.: 92561311

Sample: DGWC-38 **Lab ID: 92561311003** Collected: 09/15/21 15:45 Received: 09/16/21 09:06 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	0.543 ± 0.296 (0.468) C:100% T:NA	pCi/L	10/07/21 08:25	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	1.83 ± 0.624 (0.882) C:63% T:82%	pCi/L	10/06/21 11:18	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	2.37 ± 0.920 (1.35)	pCi/L	10/07/21 15:41	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: MCDONOUGH AP-1 RADS

Pace Project No.: 92561311

Sample: DGWC-37 **Lab ID: 92561311004** Collected: 09/16/21 16:50 Received: 09/17/21 17:06 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Pace Analytical Services - Greensburg						
Radium-226	EPA 9315	0.0559 ± 0.115 (0.268) C:94% T:NA	pCi/L	10/19/21 08:56	13982-63-3	
Pace Analytical Services - Greensburg						
Radium-228	EPA 9320	0.635 ± 0.455 (0.891) C:73% T:86%	pCi/L	10/14/21 14:21	15262-20-1	
Pace Analytical Services - Greensburg						
Total Radium	Total Radium Calculation	0.691 ± 0.570 (1.16)	pCi/L	10/20/21 17:24	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: MCDONOUGH AP-1 RADS

Pace Project No.: 92561311

Sample: DGWC-39 **Lab ID: 92561311005** Collected: 09/17/21 10:30 Received: 09/17/21 17:06 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Pace Analytical Services - Greensburg						
Radium-226	EPA 9315	0.149 ± 0.141 (0.271) C:95% T:NA	pCi/L	10/19/21 08:57	13982-63-3	
Pace Analytical Services - Greensburg						
Radium-228	EPA 9320	0.762 ± 0.485 (0.922) C:76% T:83%	pCi/L	10/14/21 14:21	15262-20-1	
Pace Analytical Services - Greensburg						
Total Radium	Total Radium Calculation	0.911 ± 0.626 (1.19)	pCi/L	10/20/21 17:24	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: MCDONOUGH AP-1 RADS

Pace Project No.: 92561311

Sample: DGWC-67 **Lab ID: 92561311006** Collected: 09/16/21 15:00 Received: 09/17/21 17:06 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Pace Analytical Services - Greensburg						
Radium-226	EPA 9315	0.126 ± 0.135 (0.267) C:84% T:NA	pCi/L	10/19/21 08:58	13982-63-3	
Pace Analytical Services - Greensburg						
Radium-228	EPA 9320	0.0750 ± 0.384 (0.877) C:75% T:78%	pCi/L	10/14/21 14:21	15262-20-1	
Pace Analytical Services - Greensburg						
Total Radium	Total Radium Calculation	0.201 ± 0.519 (1.14)	pCi/L	10/20/21 17:24	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: MCDONOUGH AP-1 RADS

Pace Project No.: 92561311

Sample: DGWC-68A **Lab ID: 92561311007** Collected: 09/16/21 14:16 Received: 09/17/21 17:06 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	1.17 ± 0.327 (0.216) C:95% T:NA	pCi/L	10/19/21 09:31	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	0.568 ± 0.418 (0.820) C:77% T:86%	pCi/L	10/14/21 14:21	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	1.74 ± 0.745 (1.04)	pCi/L	10/20/21 17:24	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: MCDONOUGH AP-1 RADS

Pace Project No.: 92561311

Sample: DGWC-69 **Lab ID: 92561311008** Collected: 09/16/21 10:35 Received: 09/17/21 17:06 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	1.22 ± 0.332 (0.221) C:97% T:NA	pCi/L	10/19/21 09:31	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	0.839 ± 0.511 (0.971) C:77% T:81%	pCi/L	10/14/21 14:21	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	2.06 ± 0.843 (1.19)	pCi/L	10/20/21 17:24	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: MCDONOUGH AP-1 RADS

Pace Project No.: 92561311

Sample: DUP-6 **Lab ID: 92561311009** Collected: 09/16/21 00:00 Received: 09/17/21 17:06 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	0.902 ± 0.283 (0.220) C:92% T:NA	pCi/L	10/19/21 09:31	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	0.650 ± 0.443 (0.855) C:76% T:83%	pCi/L	10/14/21 14:21	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	1.55 ± 0.726 (1.08)	pCi/L	10/20/21 17:24	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL - RADIOCHEMISTRY

Project: MCDONOUGH AP-1 RADS

Pace Project No.: 92561311

QC Batch:	465348	Analysis Method:	EPA 9320
QC Batch Method:	EPA 9320	Analysis Description:	9320 Radium 228
		Laboratory:	Pace Analytical Services - Greensburg

Associated Lab Samples: 92561311001, 92561311002, 92561311003

METHOD BLANK: 2247079 Matrix: Water

Associated Lab Samples: 92561311001, 92561311002, 92561311003

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.625 ± 0.317 (0.544) C:74% T:91%	pCi/L	10/06/21 11:18	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL - RADIOCHEMISTRY

Project: MCDONOUGH AP-1 RADS

Pace Project No.: 92561311

QC Batch: 465350	Analysis Method: EPA 9315
QC Batch Method: EPA 9315	Analysis Description: 9315 Total Radium
	Laboratory: Pace Analytical Services - Greensburg

Associated Lab Samples: 92561311001, 92561311002, 92561311003

METHOD BLANK: 2247083 Matrix: Water

Associated Lab Samples: 92561311001, 92561311002, 92561311003

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	0.0502 ± 0.146 (0.360) C:88% T:NA	pCi/L	10/07/21 08:30	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

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QUALIFIERS

Project: MCDONOUGH AP-1 RADS

Pace Project No.: 92561311

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

Acid preservation may not be appropriate for 2 Chloroethylvinyl ether.

A separate vial preserved to a pH of 4-5 is recommended in SW846 Chapter 4 for the analysis of Acrolein and Acrylonitrile by EPA Method 8260.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Reported results are not rounded until the final step prior to reporting. Therefore, calculated parameters that are typically reported as "Total" may vary slightly from the sum of the reported component parameters.

Act - Activity

Unc - Uncertainty: SDWA = 1.96 sigma count uncertainty, all other matrices = Expanded Uncertainty (95% confidence interval).

Gamma Spec = Expanded Uncertainty (95.4% Confidence Interval)

(MDC) - Minimum Detectable Concentration

Trac - Tracer Recovery (%)

Carr - Carrier Recovery (%)

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: MCDONOUGH AP-1 RADS
Pace Project No.: 92561311

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92561311001	DGWC-40	EPA 9315	465350		
92561311002	FB-4	EPA 9315	465350		
92561311003	DGWC-38	EPA 9315	465350		
92561311004	DGWC-37	EPA 9315	466957		
92561311005	DGWC-39	EPA 9315	466957		
92561311006	DGWC-67	EPA 9315	466957		
92561311007	DGWC-68A	EPA 9315	466957		
92561311008	DGWC-69	EPA 9315	466957		
92561311009	DUP-6	EPA 9315	466957		
92561311001	DGWC-40	EPA 9320	465348		
92561311002	FB-4	EPA 9320	465348		
92561311003	DGWC-38	EPA 9320	465348		
92561311004	DGWC-37	EPA 9320	467255		
92561311005	DGWC-39	EPA 9320	467255		
92561311006	DGWC-67	EPA 9320	467255		
92561311007	DGWC-68A	EPA 9320	467255		
92561311008	DGWC-69	EPA 9320	467255		
92561311009	DUP-6	EPA 9320	467255		
92561311001	DGWC-40	Total Radium Calculation	467218		
92561311002	FB-4	Total Radium Calculation	467218		
92561311003	DGWC-38	Total Radium Calculation	467224		
92561311004	DGWC-37	Total Radium Calculation	469112		
92561311005	DGWC-39	Total Radium Calculation	469112		
92561311006	DGWC-67	Total Radium Calculation	469112		
92561311007	DGWC-68A	Total Radium Calculation	469112		
92561311008	DGWC-69	Total Radium Calculation	469112		
92561311009	DUP-6	Total Radium Calculation	469112		


REPORT OF LABORATORY ANALYSIS

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	Document Name: Sample Condition: Upon Receipt (SCUR)	Document Revised: October 28, 2020 Page 1 of 2
	Document No.: F-CAR-CS-033-Rev.07	Issuing Authority: Pace Carolinas Quality Office

Laboratory receiving samples:

Asheville Eden Greenwood Huntersville Raleigh Mechanicsville Atlanta Kernersville

Sample Condition Upon Receipt	Client Name: <u>CyD Power</u>	Project WO#: 92561303
Courier: <input checked="" type="checkbox"/> Commercial	<input type="checkbox"/> Fed Ex <input type="checkbox"/> UPS <input type="checkbox"/> USPS <input type="checkbox"/> Client <input type="checkbox"/> Pace <input type="checkbox"/> Other: _____	 92561303
Custody Seal Present? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Seals Intact? <input type="checkbox"/> Yes <input type="checkbox"/> No	

Packing Material: Bubble Wrap Bubble Bags None Other

Thermometer: IR Gun ID: 083 White Blue None

Biological Tissue Frozen? Yes No N/A

Cooler Temp: 2.4 Correction Factor: ±0 Type of Ice: _____

Cooler Temp Corrected (°C): 2.4

Temp should be above freezing to 6°C
 Samples out of temp criteria. Samples on ice, cooling process has begun

USDA Regulated Soil (N/A, water sample)

Did samples originate in a quarantine zone within the United States: CA, NY, or SC (check maps)? Yes No

Did samples originate from a foreign source (Internationally, including Hawaii and Puerto Rico)? Yes No

Chain of Custody Present?	Yes	No	N/A	1.
Chain of Custody Present?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1.
Samples Arrived within Hold Time?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2.
Short Hold Time Analysis (<72 hr.)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	3.
Rush Turn Around Time Requested?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	4. <u>10 Day TAT</u>
Sufficient Volume?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	5.
Correct Containers Used?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	6.
-Pace Containers Used?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Containers Intact?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	7.
Dissolved analysis: Samples Field Filtered?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	8.
Sample Labels Match COC?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	9.
-Includes Date/Time/ID/Analysis Matrix: <u>WT</u>				
Headspace in VOA Vials (>5-6mm)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	10.
Trip Blank Present?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	11.
Trip Blank Custody Seals Present?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	

COMMENTS/SAMPLE DISCREPANCY _____ Field Data Required? Yes No

Lot ID of split containers: _____

CLIENT NOTIFICATION/RESOLUTION _____

Person contacted: _____ Date/Time: _____

Project Manager SCUR Review: _____ Date: _____

Project Manager SRF Review: _____ Date: _____

CHAIN-OF-CUSTODY / Analytical Request Document
 This Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Bohling

Section A Requested Client Information:
 Company: GEORJA Power - C&M Construction Resources
 Address: 2427 Mariner Road
 Alameda, CA 94508
 Contact: jwh@georja.com
 Phone: (404) 368-2228
 Requested Due Date: 10 Day TAT

Section B Requested Project Information:
 Report To: SU Alameda
 Order To: Order
 Project Name: Palm Meadows AP 1
 Project Location: Palm Meadows AP 1
 Project #:

Section C Analytical Information:
 Collection: 8/24/2021
 Company Name: GEORJA Power - C&M Construction Resources
 Address: 2427 Mariner Road, Alameda, CA 94508
 Project Manager: Kevin Hering
 Test Method: Regulatory Agency
 State: CA

ITEM #	SAMPLE ID	MATRIX	DATE	TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	PRESERVATIVES					ANALYSIS TEST				Residual Chlorine (Y/N)		
							H2SO4	HNO3	HCl	H2O2	Other	App (IUV) Total Metals	Ca, F, SO4, TDS	Radium 226/228				
1	DSVC-40	Water	9/15/21	18:30		5	2	3				X	X	X				
2	BM-4	Water	9/15/21	18:15		5	2	3				X	X	X				
3																		
4																		
5																		
6																		
7																		
8																		
9																		
10																		
11																		
12																		
13																		
14																		

ADDITIONAL COMMENTS

Requested by: JWH
 Date: 9-15-21
 Time: 9:30 AM
 Accepted by: K. Hering
 Date: 9-15-21
 Time: 8:30 AM

TEMP in c: _____
 Received on (Y/N): _____
 Cooled (Y/N): _____
 Samples Inlet (Y/N): _____

DATE Signed: 9-15-21

Just Wabersack / JWH

Laboratory receiving samples:

Asheville Eden Greenwood Huntersville Raleigh Mechanicsville Atlanta Kernersville

Sample Condition Upon Receipt	Client Name: <u>Georgia Power</u>	Project #:
-------------------------------	--------------------------------------	------------

Courier: Commercial Fed Ex UPS USPS Client Pace Other: _____

Custody Seal Present? Yes No Seals Intact? Yes No

Date/Initials Person Examining Contents: MT 9/16/20

Packing Material: Bubble Wrap Bubble Bags None Other

Biological Tissue Frozen? Yes No N/A

Thermometer: IR Gun ID: 214 Type of Ice: Wet Blue None

Cooler Temp: 3.2 Correction Factor: Add/Subtract (°C) +0.1

Temp should be above freezing to 6°C
 Samples out of temp criteria. Samples on ice, cooling process has begun

Cooler Temp Corrected (°C): 3.1

USDA Regulated Soil (N/A, water sample)

Did samples originate in a quarantine zone within the United States: CA, NY, or SC (check maps)? Yes No

Did samples originate from a foreign source (internationally, including Hawaii and Puerto Rico)? Yes No

Chain of Custody Present?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>	Comments/Discrepancy:
Samples Arrived within Hold Time?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>	1.
Short Hold Time Analysis (<72 hr.)?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A <input type="checkbox"/>	2.
Rush Turn Around Time Requested?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A <input type="checkbox"/>	3.
Sufficient Volume?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>	4.
Correct Containers Used?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>	5.
Pace Containers Used?	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>	6.
Containers Intact?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>	7.
Dissolved analysis: Samples Field Filtered?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A <input type="checkbox"/>	8.
Sample Labels Match CDC?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>	9.
Includes Date/Time/ID/Analysis Matrix:	<u>WT</u>	
Headspace in VOA Vials (>5.6mm)?	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input checked="" type="checkbox"/>	10.
Trip Blank Present?	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input checked="" type="checkbox"/>	11.
Trip Blank Custody Seals Present?	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input checked="" type="checkbox"/>	

COMMENTS/SAMPLE DISCREPANCY

Field Data Required? Yes No

Lot ID of split containers:

CLIENT NOTIFICATION/RESOLUTION

Person contacted: _____ Date/Time: _____

Project Manager SCUR Review: _____ Date: _____

Project Manager SRF Review: _____ Date: _____

CHAIN-OF-CUSTODY / Analytical Request Document
 The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Section A: Client Information
 Section B: Requested Project Information
 Section C: Analytical Information
 Page: 1 of 1

Client Information:
 Name: Example Power - Core Construction Services
 Address: 3400 Kerner Road
 City: Atlanta, GA 30339
 Phone: (404) 500-7298
 Email: info@example.com

Requested Project Information:
 Project No: 10-DVT-1
 Project Name: Project M-Donough Jct 1
 Project Location: 10-DVT-1

Analytical Information:
 Analytical Requested by: John Doe
 Analytical Requested for: Soil Analysis
 Analytical Method: Standard
 Analytical Reference: None

NO.	DATE	TIME	SAMPLE TEMP AT COLLECTION	PRESERVATION			ANALYSIS TEST		RESIDUAL CHLORIDE (Y/N)	PH ± 0.05
				UNPRESERVED - Ice	HNO3 + Ice	HCl	App. ILMV Total Metals	Cl, F, SO4, TDS		
1	7-16-21	08:23					X	X	X	
2	7-16-21	09:05					X	X	X	
3	7-16-21	09:21					X	X	X	
4	7-16-21	09:30					X	X	X	

NO.	DATE	TIME	TEMP IN C	RECEIVED ON	CURBODY SIGNED	COPIES	SAMPLES
1	7-16-21	08:23	31.2	Y	Y	Y	Y
2	7-16-21	09:05	31.2	Y	Y	Y	Y
3	7-16-21	09:21	31.2	Y	Y	Y	Y
4	7-16-21	09:30	31.2	Y	Y	Y	Y

Signature and Date:
 Date Signed: 9-16-21
 Signature: John Doe



Document Name:
Sample Condition Upon Receipt (SCUR)
Document No.:
F-CAR-CS-033-Rev.07

Document Revised: October 28, 2020
Page 1 of 2
Issuing Authority:
Pace Carolinas Quality Office

Laboratory receiving samples:

Asheville Eden Greenwood Huntersville Raleigh Mechanicsville Atlanta Kernersville

Sample Condition
Upon Receipt

Client Name:

G A Power

Project #:

Courier: Fed Ex UPS USPS Client
 Commercial Pace Other: _____

Custody Seal Present? Yes No Seals Intact? Yes No

Date/Initials Person Examining Contents: 9/17/20
CO4

Packing Material: Bubble Wrap Bubble Bags None Other

Biological Tissue Frozen? Yes No N/A

Thermometer: IR Gun ID: 083 Type of ice: Wet Blue None

Cooler Temp: 2.0 Correction Factor: Add/Subtract (°C) 0.0

Temp should be above freezing to 6°C
 Samples out of temp criteria. Samples on ice, cooling process has begun

Cooler Temp Corrected (°C): 2.0

USDA Regulated Soil (N/A, water sample)

Did samples originate in a quarantine zone within the United States: CA, NY, or SC (check maps)? Yes No

Did samples originate from a foreign source (internationally, including Hawaii and Puerto Rico)? Yes No

	Comments/Discrepancy:
Chain of Custody Present? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	1.
Samples Arrived within Hold Time? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	2.
Short Hold Time Analysis (<72 hr.)? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	3.
Rush Turn Around Time Requested? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	4.
Sufficient Volume? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	5.
Correct Containers Used? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	6.
-Pace Containers Used? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Containers Intact? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	7.
Dissolved analysis: Samples Field Filtered? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	8.
Sample Labels Match COC? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	9.
-Includes Date/Time/ID/Analysis Matrix: <u>W</u>	
Headspace in VOA Vials (>5-6mm)? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	10.
Trip Blank Present? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	11.
Trip Blank Custody Seals Present? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	

COMMENTS/SAMPLE DISCREPANCY

Field Date Required? Yes No

Lot ID of split containers:

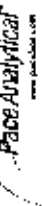
CLIENT NOTIFICATION/RESOLUTION

Person contacted: _____ Date/Time: _____

Project Manager SCURF Review: _____ Date: _____

Project Manager SHF Review: _____ Date: _____

Quality Control Sample Performance Assessment



Analyst Must Manually Enter All Fields Highlighted in Yellow.

Test: Ra-228
 Analyst: VAL
 Date: 10/1/2021
 Worksheet: 62852
 Matrix: WT

Method Blank Assessment

MB Sample ID	224-1079
MB Concentration	0.625
MB 2 Sigma CSU	0.317
MB MDC	0.544
MB Numerical Performance Indicator	3.06
MB Status vs Numerical Indicator:	Fail*
MB Status vs MDC:	See Comment*

Laboratory Control Sample Assessment

ICSD (Y or N)?	Y
LCSD 2852	10/8/2021
LCSD 2852	21.029
Count Date:	10/8/2021
Spike ID:	37.949
Decay Corrected Spike Concentration (pCi/ml):	0.20
Volume Used (mL):	0.809
Aliquot Volume (L, g, F):	9.379
Target Conc (pCi/L, g, F):	0.460
Uncertainty (Calculated):	8.389
Result (pCi/L, g, F):	1.704
LCSD 2 Sigma CSU (pCi/L, g, F):	-1.07
Numerical Performance Indicator:	89.73%
Status vs Numerical Indicator:	Pass
Upper % Recovery Limits:	135%
Lower % Recovery Limits:	60%

Duplicate Sample Assessment

ICSD (Y or N)?	Y
LCSD 2852	10/8/2021
LCSD 2852	21.029
Sample ID:	37.949
Duplicate Sample ID:	0.20
Sample Result (pCi/L, g, F):	0.809
Sample Result 2 Sigma CSU (pCi/L, g, F):	1.704
Sample Duplicate Result (pCi/L, g, F):	7.162
Sample Duplicate Result 2 Sigma CSU (pCi/L, g, F):	1.451
Are sample and/or duplicate results below HL?	NO
Duplicate Numerical Performance Indicator:	1.075
(Based on the LCSD CSU Percent Recoveries) Duplicate RPD:	16.10%
Duplicate Status vs Numerical Indicator:	Pass
Duplicate Status vs RPD:	Pass
% RPD Limit:	36%

Sample Matrix Spike Control Assessment

Sample Collection Date	MS/MSD 1	MS/MSD 2
Sample I.D. Sample MS ID Sample MSD ID Spike I.D.		
MS/MSD Decay Corrected Spike Concentration (pCi/ml): Spike Volume Used in MS (ml): Spike Volume Used in MSD (ml): MS Aliquot (L, g, F): MS Target Conc (pCi/L, g, F): MSD Aliquot (L, g, F): MSD Target Conc (pCi/L, g, F): MS Spike Uncertainty (Calculated): MSD Spike Uncertainty (Calculated)		
Sample Result: Sample Result 2 Sigma CSU (pCi/L, g, F): Sample Matrix Spike Result: Sample Matrix Spike Duplicate Result: Sample Matrix Spike Duplicate Result: MS Numerical Performance Indicator: MS Percent Recovery: MSD Percent Recovery: MS Status vs Numerical Indicator: MSD Status vs Numerical Indicator: MS Status vs Recovery: MSD Status vs Recovery: MS/MSD Upper % Recovery Limits: MS/MSD Lower % Recovery Limits:		

Matrix Spike/Matrix Spike Duplicate Sample Assessment

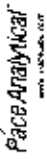
Sample I.D.	MS/MSD 1	MS/MSD 2
Sample MS ID Sample MSD ID		
Matrix Spike Result 2 Sigma CSU (pCi/L, g, F): Sample Matrix Spike Duplicate Result: Sample Matrix Spike Duplicate Result: Duplicate Numerical Performance Indicator: (Based on the Percent Recoveries) MS/MSD Duplicate RPD: MS/MSD Duplicate Status vs Numerical Indicator: MS/MSD Duplicate Status vs RPD: % RPD Limit:		

* Evaluation of duplicate precision is not applicable if either the sample or duplicate results are below the MDC.

Comments:
*The method blank result is below the reporting limit for this analysis and is acceptable

10/1/2021

Quality Control Sample Performance Assessment



Analyst Must Manually Enter All Fields Highlighted in Yellow.

Test: Ra-226
 Analyst: JULY
 Date: 10/14/2021
 Worksheet: 63017
 Matrix: DW

Method Blank Assessment	
MB Sample ID	225015
MB Concentration	0.028
MB Counting Uncertainty	0.142
MB MDC	0.353
MB Numerical Performance Indicator	0.38
MB Status vs Numerical Indicator	N/A
MB Status vs MDC	Pass

LCS D (Y or N)?	LCS D (Y or N)?	
	LCS D63017	LCS D63017
Count Date:	10/19/2021	10/19/2021
Spike I.D.:	19-033	19-033
Decay Corrected Spike Concentration (pCi/mL):	24.033	24.033
Volume Used (mL):	0.10	0.10
Aliquot Volume (L, g, F):	0.503	0.502
Target Conc. (pCi/L, g, F):	4.780	4.782
Uncertainty (Calculated):	0.057	0.058
Result (pCi/L, g, F):	5.814	5.134
LCS/LCSD Counting Uncertainty (pCi/L, g, F):	0.601	0.572
Numerical Performance Indicator:	3.38	1.17
Percent Recovery	121.64%	107.13%
Status vs Numerical Indicator:	N/A	N/A
Status vs Recovery	Pass	Pass
Upper % Recovery Limit:	125%	125%
Lower % Recovery Limit:	75%	75%

Duplicate Sample Assessment	
Sample I.D.	92561311008
Duplicate Sample I.D.	92561311006DUP
Duplicate Result (pCi/L, g, F):	0.126
Sample Result Counting Uncertainty (pCi/L, g, F):	0.134
Sample Duplicate Result (pCi/L, g, F):	0.107
Sample Duplicate Result Counting Uncertainty (pCi/L, g, F):	0.111
Are sample and/or duplicate results below RL?	See Below #
Duplicate Numerical Performance Indicator:	0.214
Duplicate Percent Recoveries Duplicate RPD:	16.30%
Duplicate Status vs Numerical Indicator:	N/A
Duplicate Status vs RPD:	Pass
% RPD Limit:	25%

Evaluation of duplicate precision is not applicable if either the sample or duplicate results are below the MDC.

Comments:

10/14/2021

Sample Matrix Spike Control Assessment	
Sample Collection Date:	Sample I.D.
Sample MS ID:	Sample MS ID
Sample MSD ID:	Sample MSD ID
Spike I.D.:	Spike I.D.
MSMSD Decay Corrected Spike Concentration (pCi/mL):	Spike Volume Used in MS (mL):
Spike Volume Used in MSO (mL):	MS Aliquot (L, g, F):
MS Target Conc. (pCi/L, g, F):	MSD Aliquot (L, g, F):
MS Target Conc. (pCi/L, g, F):	MS Spike Uncertainty (Calculated):
MSD Spike Uncertainty (Calculated):	MSD Spike Uncertainty (Calculated):
Sample Result Counting Uncertainty (pCi/L, g, F):	Sample Result
Sample Matrix Spike Result:	Sample Matrix Spike Result
Sample Matrix Spike Duplicate Result:	Sample Matrix Spike Duplicate Result
Matrix Spike Duplicate Result Counting Uncertainty (pCi/L, g, F):	MS Numerical Performance Indicator:
MS Numerical Performance Indicator:	MS Percent Recovery:
MS Percent Recovery:	MSD Percent Recovery:
MS Status vs Numerical Indicator:	MS Status vs Numerical Indicator:
MS Status vs Recovery:	MS Status vs Recovery:
MS/MSD Upper % Recovery Limit:	MS/MSD Lower % Recovery Limit:

Matrix Spike/Matrix Spike Duplicate Sample Assessment	
Sample I.D.:	Sample MS ID:
Sample MSO I.D.:	Sample MSO I.D.:
Matrix Spike Result Counting Uncertainty (pCi/L, g, F):	Matrix Spike Duplicate Result Counting Uncertainty (pCi/L, g, F):
Matrix Spike Duplicate Result Counting Uncertainty (pCi/L, g, F):	Duplicate Numerical Performance Indicator:
Matrix Spike Duplicate Percent Recoveries Duplicate RPD:	MS/MSD Duplicate Status vs Numerical Indicator:
MS/MSD Duplicate Status vs RPD:	% RPD Limit:

Quality Control Sample Performance Assessment



Analyst Must Manually Enter All Fields Highlighted in Yellow.

Test: RA-226
 Analyst: CLA
 Date: 9/30/2021
 Worksheet: 62853
 Matrix: OW

Method Blank Assessment	
MB Sample ID	2247063
MB Concentration	0.050
MB Counting Uncertainty	0.146
MB MDC	0.360
MB Numerical Performance Indicator	0.67
MB Status vs. MDC	N/A
MB Status vs. MDC	Pass

Laboratory Control Sample Assessment	LCS (Y or N)†	
	Y	N
Decay Corrected Spike Concentration (pCi/mL):	Count Date	LCS 062853
	Spike ID	10/72021
	Volume Used (mL)	19-033
	Aliquot Volume (L, g, F)	24.033
	Target Conc. (pCi/L, g, F)	0.10
Uncertainty (Calculated):	Result (pCi/L, g, F)	0.505
	Upper % Recovery Limits	4.725
	Lower % Recovery Limits	0.885
LCS/LCSD Counting Uncertainty (pCi/L, g, F):	Percent Recovery	100.82%
	Status vs Numerical Indicator	N/A
	Upper % Recovery Limits	Pass
Numerical Performance Indicator:	Lower % Recovery Limits	125%
	MS/MSD Upper % Recovery Limits	75%
	MS/MSD Lower % Recovery Limits	75%

Duplicate Sample Assessment	LCS (Y or N)†	
	Y	N
Sample Result Counting Uncertainty (pCi/L, g, F):	Sample ID	92560765030
	Duplicate Sample ID	92560765020DUP
	Sample Result (pCi/L, g, F)	1.170
	Sample Duplicate Result (pCi/L, g, F)	0.367
	Sample Duplicate Counting Uncertainty (pCi/L, g, F)	1.196
Are sample and/or duplicate results below RL?	NO	0.354
	Duplicate Numerical Performance Indicator	See Below #
	Duplicate Percent Recoveries	0.052
(Based on the LCS/LCSD Percent Recoveries) Duplicate RFD:	Duplicate Status vs Numerical Indicator	1.15%
	Duplicate Status vs RFD	N/A
	% RFD Limit	Pass
		25%

† Evaluation of duplicate precision is not applicable if either the sample or duplicate results are below the MDC.

Comments:

CLM
10/19/21

WAM 10/17/21

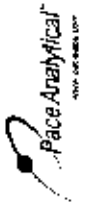
Sample Matrix Spike Control Assessment	MS/MSD 1	MS/MSD 2
<p>Sample Collection Date</p> <p>Sample ID</p> <p>Sample MS ID</p> <p>Sample MSD ID</p> <p>Spike ID</p> <p>MIS/MSD Dicity Connected</p> <p>Spike Concentration (pCi/mL)</p> <p>Spike Volume Used in MS (mL)</p> <p>Spike Volume Used in MSD (mL)</p> <p>MS Aliquot (L, g, F)</p> <p>MS Target Conc. (pCi/L, g, F)</p> <p>MSD Aliquot (L, g, F)</p> <p>MSD Target Conc. (pCi/L, g, F)</p> <p>MSD Spike Uncertainty (Calculated)</p> <p>MSD Spike Uncertainty (Calculated)</p> <p>Sample Result</p> <p>Sample Matrix Spike Result</p> <p>Matrix Spike Result Counting Uncertainty (pCi/L, g, F)</p> <p>Sample Matrix Spike Duplicate Result</p> <p>Matrix Spike Duplicate Result Counting Uncertainty (pCi/L, g, F)</p> <p>MS Numerical Performance Indicator</p> <p>MSD Numerical Performance Indicator</p> <p>MS Percent Recovery</p> <p>MSD Percent Recovery</p> <p>MS Status vs Numerical Indicator</p> <p>MSD Status vs Numerical Indicator</p> <p>MS Status vs Numerical Indicator</p> <p>MSD Status vs Numerical Indicator</p> <p>MS/MSD Upper % Recovery Limits</p> <p>MS/MSD Lower % Recovery Limits</p>		

Matrix Spike/Matrix Spike Duplicate Sample Assessment
<p>Sample ID</p> <p>Sample MS ID</p> <p>Sample MSD ID</p> <p>Sample Matrix Spike Result</p> <p>Matrix Spike Result Counting Uncertainty (pCi/L, g, F)</p> <p>Sample Matrix Spike Duplicate Result</p> <p>Matrix Spike Duplicate Result Counting Uncertainty (pCi/L, g, F)</p> <p>Duplicate Numerical Performance Indicator</p> <p>(Based on the Percent Recoveries) MS/MSD Duplicate RFD:</p> <p>MS/MSD Duplicate Status vs Numerical Indicator</p> <p>MS/MSD Duplicate Status vs RFD</p> <p>% RFD Limit</p>

Quality Control Sample Performance Assessment

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Test Ra-228
Analyst VAL
Date 10/12/2021
Worksheet 630659
Matrix WT



Method Blank Assessment	
MB Sample ID	2156295
MB Concentration	0.161
MB 2 Sigma CSU	0.301
MR MDC	0.746
MB Numerical Performance Indicator	-0.98
MB Status vs. Numerical Indicator	Pass
MB Status vs. MDC	Pass

Laboratory Control Sample Assessment	LCS# (Y or N)?	
	Y	N
Count Date	LCS63069	LCS063069
Spike ID	10142021	10142021
Decay Corrected Spike Concentration (pCi/mL)	21.029	21.029
Volume Used (mL)	37.849	37.849
Aliquot Volume (L, g, F)	0.10	0.10
Target Conc. (pCi/L, g, F)	0.807	0.821
Uncertainty (calculated)	4.691	4.612
Result (pCi/L, g, F)	0.230	0.226
LCS# CSD 2 Sigma CSU (pCi/L, g, F)	4.670	4.581
Numerical Performance Indicator	1.058	1.032
Status vs Numerical Indicator	-0.04	-0.06
Upper % Recovery Limits	59.54%	58.33%
Lower % Recovery Limits	N/A	N/A
Pass	Pass	Pass
135%	135%	135%
60%	60%	60%

Duplicate Sample Assessment	LCS# (Y or N)?	
	Y	N
Sample ID	LCS63069	LCS063069
Duplicate Sample ID	LCS063069	LCS063069
Sample Result (pCi/L, g, F)	4.670	4.670
Sample Duplicate Result (pCi/L, g, F)	1.058	1.058
Sample Duplicate Result 2 Sigma CSU (pCi/L, g, F)	4.581	4.581
Are sample matrix duplicate results below RL?	NO	NO
Cuplicate Numerical Performance Indicator	0.117	0.117
Duplicate Status vs Numerical Indicator	Pass	Pass
Duplicate Status vs RPD	Pass	Pass
% RPD Limit	36%	36%

Sample Matrix Spike Control Assessment	MS/MSD 1	MS/MSD 2
Sample Collection Date: Sample ID: Sample MS ID: Sample MSD ID: Spike ID:		
MS/MSD Decay Corrected Spike Concentration (pCi/mL): Spike Volume Used in MS (mL): Spike Volume Used in MSD (mL): MS Aliquot (L, g, F): MS Target Conc. (pCi/L, g, F): MSD Aliquot (L, g, F): MSD Target Conc. (pCi/L, g, F): MS Spike Uncertainty (calculated): MSD Spike Uncertainty (calculated):		
Sample Result 2 Sigma CSU (pCi/L, g, F): Sample Matrix Spike Result: Matrix Spike Result 2 Sigma CSU (pCi/L, g, F): Sample Matrix Spike Duplicate Result: Matrix Spike Duplicate Result 2 Sigma CSU (pCi/L, g, F): MS Numerical Performance Indicator: MS Numerical Performance Indicator		
MS Percent Recovery: MSD Percent Recovery: MS Status vs Numerical Indicator: MSD Status vs Numerical Indicator: MS Status vs Recovery: MSD Status vs Recovery: MS/MSD Upper % Recovery Limit: MS/MSD Lower % Recovery Limit:		

Matrix Spike/Matrix Spike Duplicate Sample Assessment
Sample ID: Sample MS ID: Sample MSD ID: Matrix Spike Result 2 Sigma CSU (pCi/L, g, F): Sample Matrix Spike Duplicate Result: Sample Matrix Spike Duplicate Result 2 Sigma CSU (pCi/L, g, F): Duplicate Numerical Performance Indicator: (Based on the Percent Recoveries) MS/MSD Duplicate RPD: MS/MSD Duplicate Status vs Numerical Indicator: MS/MSD Duplicate Status vs RPD: % RPD Limit:

Evaluation of duplicate precision is not applicable if either the sample or duplicate results are below the MDC

Comments:

6-10/15/21

November 03, 2021

Joju Abraham
Georgia Power-CCR
2480 Maner Road
Atlanta, GA 30339

RE: Project: Plant McDonough AP-1-Revised Report
Pace Project No.: 92569178

Dear Joju Abraham:

Enclosed are the analytical results for sample(s) received by the laboratory on October 28, 2021. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

- Pace Analytical Services - Charlotte
- Pace Analytical Services - Peachtree Corners, GA

Revision 1 - This revision was issued on 11/3/21 to update the reporting units to mg/L.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Nicole D'Oleo
nicole.d'oleo@pacelabs.com
(704)875-9092
Project Manager

Enclosures

cc: Stephen Benda
Daniela Herrera, Golder
Ben Hodges, Georgia Power
Kristen Jurinko
J. Shelby Mobley
Charles Norton, Southern Company
Ms. Lauren Petty, Southern Company
Dawn Prell, Golder Associates Inc.
Tim Richards, Golder Associates - Atlanta



REPORT OF LABORATORY ANALYSIS

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CERTIFICATIONS

Project: Plant McDonough AP-1-Revised Report

Pace Project No.: 92569178

Pace Analytical Services Charlotte

9800 Kinsey Ave. Ste 100, Huntersville, NC 28078

Louisiana/NELAP Certification # LA170028

North Carolina Drinking Water Certification #: 37706

North Carolina Field Services Certification #: 5342

North Carolina Wastewater Certification #: 12

South Carolina Certification #: 99006001

Florida/NELAP Certification #: E87627

Kentucky UST Certification #: 84

Virginia/VELAP Certification #: 460221

Pace Analytical Services Peachtree Corners

110 Technology Pkwy, Peachtree Corners, GA 30092

Florida DOH Certification #: E87315

Georgia DW Inorganics Certification #: 812

North Carolina Certification #: 381

South Carolina Certification #: 98011001

REPORT OF LABORATORY ANALYSIS

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SAMPLE SUMMARY

Project: Plant McDonough AP-1-Revised Report

Pace Project No.: 92569178

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92569178001	DGWC-68A	Water	10/27/21 15:20	10/28/21 08:25
92569178002	DUP-1	Water	10/27/21 00:00	10/28/21 08:25
92569178003	FB-1	Water	10/27/21 15:38	10/28/21 08:25
92569178004	EB-1	Water	10/27/21 15:40	10/28/21 08:25

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SAMPLE ANALYTE COUNT

Project: Plant McDonough AP-1-Revised Report

Pace Project No.: 92569178

Lab ID	Sample ID	Method	Analysts	Analytes Reported
92569178001	DGWC-68A	EPA 200.8	KH	4
92569178002	DUP-1	EPA 200.8	KH	4
92569178003	FB-1	EPA 200.8	KH	4
92569178004	EB-1	EPA 200.8	KH	4

PASI-C = Pace Analytical Services - Charlotte

PASI-GA = Pace Analytical Services - Peachtree Corners, GA

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Plant McDonough AP-1-Revised Report

Pace Project No.: 92569178

Sample: DGWC-68A		Lab ID: 92569178001		Collected: 10/27/21 15:20		Received: 10/28/21 08:25		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data									
Analytical Method: Pace Analytical Services - Charlotte									
Performed by	CUSTOMER				1		10/28/21 09:50		
pH	6.56	Std. Units			1		10/28/21 09:50		
200.8 ATL ICPMS									
Analytical Method: EPA 200.8 Preparation Method: EPA 200.8 Pace Analytical Services - Peachtree Corners, GA									
Arsenic	0.0016J	mg/L	0.0050	0.0011	1	11/01/21 10:10	11/01/21 21:31	7440-38-2	B
Barium	0.086	mg/L	0.0050	0.00067	1	11/01/21 10:10	11/01/21 21:31	7440-39-3	
Chromium	ND	mg/L	0.0050	0.0011	1	11/01/21 10:10	11/01/21 21:31	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00039	1	11/01/21 10:10	11/01/21 21:31	7440-48-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Plant McDonough AP-1-Revised Report

Pace Project No.: 92569178

Sample: DUP-1 **Lab ID: 92569178002** Collected: 10/27/21 00:00 Received: 10/28/21 08:25 Matrix: Water

Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual
			Limit	MDL	DF				
200.8 ATL ICPMS									
Analytical Method: EPA 200.8 Preparation Method: EPA 200.8									
Pace Analytical Services - Peachtree Corners, GA									
Arsenic	0.0021J	mg/L	0.0050	0.0011	1	11/01/21 10:10	11/01/21 21:37	7440-38-2	B
Barium	0.096	mg/L	0.0050	0.00067	1	11/01/21 10:10	11/01/21 21:37	7440-39-3	
Chromium	ND	mg/L	0.0050	0.0011	1	11/01/21 10:10	11/01/21 21:37	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00039	1	11/01/21 10:10	11/01/21 21:37	7440-48-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Plant McDonough AP-1-Revised Report

Pace Project No.: 92569178

Sample: FB-1 **Lab ID: 92569178003** Collected: 10/27/21 15:38 Received: 10/28/21 08:25 Matrix: Water

Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual
			Limit	MDL	DF				
200.8 ATL ICPMS									
Analytical Method: EPA 200.8 Preparation Method: EPA 200.8									
Pace Analytical Services - Peachtree Corners, GA									
Arsenic	0.0014J	mg/L	0.0050	0.0011	1	11/01/21 10:10	11/01/21 21:43	7440-38-2	B
Barium	ND	mg/L	0.0050	0.00067	1	11/01/21 10:10	11/01/21 21:43	7440-39-3	
Chromium	ND	mg/L	0.0050	0.0011	1	11/01/21 10:10	11/01/21 21:43	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00039	1	11/01/21 10:10	11/01/21 21:43	7440-48-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Plant McDonough AP-1-Revised Report

Pace Project No.: 92569178

Sample: EB-1 **Lab ID: 92569178004** Collected: 10/27/21 15:40 Received: 10/28/21 08:25 Matrix: Water

Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual
			Limit	MDL	DF				
200.8 ATL ICPMS									
Analytical Method: EPA 200.8 Preparation Method: EPA 200.8									
Pace Analytical Services - Peachtree Corners, GA									
Arsenic	0.0014J	mg/L	0.0050	0.0011	1	11/01/21 10:10	11/01/21 21:49	7440-38-2	B
Barium	ND	mg/L	0.0050	0.00067	1	11/01/21 10:10	11/01/21 21:49	7440-39-3	
Chromium	ND	mg/L	0.0050	0.0011	1	11/01/21 10:10	11/01/21 21:49	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00039	1	11/01/21 10:10	11/01/21 21:49	7440-48-4	

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: Plant McDonough AP-1-Revised Report
Pace Project No.: 92569178

QC Batch: 656504 Analysis Method: EPA 200.8
QC Batch Method: EPA 200.8 Analysis Description: 200.8 ATL
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92569178001, 92569178002, 92569178003, 92569178004

METHOD BLANK: 3441478 Matrix: Water
Associated Lab Samples: 92569178001, 92569178002, 92569178003, 92569178004

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Arsenic	mg/L	0.0023J	0.0050	0.0011	11/01/21 19:02	
Barium	mg/L	ND	0.0050	0.00067	11/01/21 19:02	
Chromium	mg/L	ND	0.0050	0.0011	11/01/21 19:02	
Cobalt	mg/L	ND	0.0050	0.00039	11/01/21 19:02	

LABORATORY CONTROL SAMPLE: 3441479

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Arsenic	mg/L	0.1	0.11	105	85-115	
Barium	mg/L	0.1	0.10	103	85-115	
Chromium	mg/L	0.1	0.10	104	85-115	
Cobalt	mg/L	0.1	0.10	103	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3441480 3441481

Parameter	Units	92569142003 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Arsenic	mg/L	ND	0.1	0.1	0.10	0.10	101	101	70-130	0	20	
Barium	mg/L	19.6 ug/L	0.1	0.1	0.13	0.13	108	109	70-130	1	20	
Chromium	mg/L	ND	0.1	0.1	0.11	0.11	106	108	70-130	1	20	
Cobalt	mg/L	ND	0.1	0.1	0.11	0.11	107	107	70-130	1	20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3441482 3441483

Parameter	Units	92569533003 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Arsenic	mg/L	ND	0.1	0.1	0.099	0.10	99	100	70-130	1	20	
Barium	mg/L	23.0 ug/L	0.1	0.1	0.13	0.13	110	105	70-130	4	20	
Chromium	mg/L	ND	0.1	0.1	0.11	0.11	106	105	70-130	1	20	
Cobalt	mg/L	ND	0.1	0.1	0.10	0.10	102	104	70-130	2	20	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

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QUALIFIERS

Project: Plant McDonough AP-1-Revised Report

Pace Project No.: 92569178

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

Acid preservation may not be appropriate for 2 Chloroethylvinyl ether.

A separate vial preserved to a pH of 4-5 is recommended in SW846 Chapter 4 for the analysis of Acrolein and Acrylonitrile by EPA Method 8260.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Reported results are not rounded until the final step prior to reporting. Therefore, calculated parameters that are typically reported as "Total" may vary slightly from the sum of the reported component parameters.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

ANALYTE QUALIFIERS

B Analyte was detected in the associated method blank.

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Plant McDonough AP-1-Revised Report

Pace Project No.: 92569178

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92569178001	DGWC-68A				
92569178001	DGWC-68A	EPA 200.8	656504	EPA 200.8	656575
92569178002	DUP-1	EPA 200.8	656504	EPA 200.8	656575
92569178003	FB-1	EPA 200.8	656504	EPA 200.8	656575
92569178004	EB-1	EPA 200.8	656504	EPA 200.8	656575

REPORT OF LABORATORY ANALYSIS

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Laboratory receiving samples:

Asheville Eden Greenwood Huntersville Raleigh Mechanicsville Atlanta Kernersville

Sample Condition Upon Receipt

Client Name:

GPA Power

Project #

WO#: 92569178



Courier: Commercial Fed Ex Pace UPS USPS Other: Client

Custody Seal Present? Yes No Seals Intact? Yes No

Date/Initials Person Examining Contents: 10/23/21 Kew

Packing Material: Bubble Wrap Bubble Bags None Other

Biological Tissue Frozen?

Yes No N/A

Thermometer:

IR Gun ID: T4R2214 Type of Ice: Wet Blue None

Cooler Temp: 3.3 Correction Factor: Add/Subtract (°C) ±0

Temp should be above freezing to 6°C

Samples out of temp criteria. Samples on ice, cooling process has begun

Cooler Temp Corrected (°C): 3.3

USDA Regulated Soil (N/A, water sample)

Did samples originate in a quarantine zone within the United States: CA, NY, or SC (check maps)?

Did samples originate from a foreign source (internationally, including Hawaii and Puerto Rico)? Yes No

Yes No

Comments/Discrepancy:

Chain of Custody Present?	Yes	No	N/A	1.
Chain of Custody Present?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1.
Samples Arrived within Hold Time?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2.
Short Hold Time Analysis (<72 hr.)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	3.
Rush Turn Around Time Requested?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	4. <u>10 Days</u>
Sufficient Volume?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	5.
Correct Containers Used?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	6.
-Pace Containers Used?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Containers Intact?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	7.
Dissolved analysis: Samples Field Filtered?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	8.
Sample Labels Match COC?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	9.
-Includes Date/Time/ID/Analysis Matrix:	<u>W</u>			
Headspace in VOA Vials (>5-6mm)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	10.
Trip Blank Present?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	11.
Trip Blank Custody Seals Present?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	

COMMENTS/SAMPLE DISCREPANCY

Field Data Required? Yes No

Lot ID of split containers:

CLIENT NOTIFICATION/RESOLUTION

Person contacted: _____ Date/Time: _____

Project Manager SCURF Review: _____ Date: _____

Project Manager SRF Review: _____ Date: _____



Document Name:
Sample Condition Upon Receipt(SCUR)

Document Revised: October 28, 2020
Page 2 of 2

Document No.:
F-CAR-CS-033-Rev.07

Issuing Authority:
Pace Carolinas Quality Office

*Check mark top half of box if pH and/or dechlorination is verified and within the acceptance range for preservation samples.

Project #

WO# : 92569178

PM: NMG

Due Date: 11/11/21

Exceptions: VOA, Coliform, TOC, Oil and Grease, DRO/8015 (water) DOC, LLHg

CLIENT: GR-GA Power

**Bottom half of box is to list number of bottles

Item#	BP4U-125 mL Plastic Unpreserved (N/A) (Cl-)	BP3U-250 mL Plastic Unpreserved (N/A)	BP2U-500 mL Plastic Unpreserved (N/A)	BP1U-1 liter Plastic Unpreserved (N/A)	BP4S-125 mL Plastic H2SO4 (pH < 2) (Cl-)	BP3N-250 mL plastic HNO3 (pH < 2)	BP4Z-125 mL Plastic ZN Acetate & NaOH (>9)	BP4C-125 mL Plastic NaOH (pH > 12) (Cl-)	WGFU-Wide-mouthed Glass jar Unpreserved	AG1U-1 liter Amber Unpreserved (N/A) (Cl-)	AG1H-1 liter Amber HCl (pH < 2)	AG3U-250 mL Amber Unpreserved (N/A) (Cl-)	AG1S-1 liter Amber H2SO4 (pH < 2)	AG3S-250 mL Amber H2SO4 (pH < 2)	AG3A(DG3A)-250 mL Amber NH4Cl (N/A)(Cl-)	DG9H-40 mL VOA HCl (N/A)	VG9T-40 mL VOA Na2S2O3 (N/A)	VG9U-40 mL VOA Unp (N/A)	DG9P-40 mL VOA H3PO4 (N/A)	VOAK (6 vials per kit)-5035 kit (N/A)	V/GK (3 vials per kit)-VPH/Gas kit (N/A)	SP5T-125 mL Sterile Plastic (N/A - lab)	SP2T-250 mL Sterile Plastic (N/A - lab)		BP3A-250 mL Plastic (NH2)2SO4 (9.3-9.7)	AG0U-100 mL Amber Unpreserved vials (N/A)	VSGU-20 mL Scintillation vials (N/A)	DG9U-40 mL Amber Unpreserved vials (N/A)		
1																														
2																														
3																														
4																														
5																														
6																														
7																														
8																														
9																														
10																														
11																														
12																														

pH Adjustment Log for Preserved Samples

Sample ID	Type of Preservative	pH upon receipt	Date preservation adjusted	Time preservation adjusted	Amount of Preservative added	Lot #

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. Out of hold, incorrect preservative, out of temp, incorrect containers.

October 22, 2021

Joju Abraham
Georgia Power-CCR
2480 Maner Road
Atlanta, GA 30339

RE: Project: MCDONOUGH UPGRADIENT
Pace Project No.: 92560138

Dear Joju Abraham:

Enclosed are the analytical results for sample(s) received by the laboratory between September 09, 2021 and September 10, 2021. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

- Pace Analytical Services - Asheville
- Pace Analytical Services - Charlotte
- Pace Analytical Services - Peachtree Corners, GA

If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Nicole D'Oleo
nicole.d'oleo@pacelabs.com
(704)875-9092
Project Manager

Enclosures

cc: Stephen Benda
Daniela Herrera, Golder
Ben Hodges, Georgia Power
Kristen Jurinko
J. Shelby Mobley
Charles Norton, Southern Company
Ms. Lauren Petty, Southern Company
Dawn Prell, Golder Associates Inc.
Tim Richards, Golder Associates - Atlanta



REPORT OF LABORATORY ANALYSIS

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CERTIFICATIONS

Project: MCDONOUGH UPGRADIENT
Pace Project No.: 92560138

Pace Analytical Services Charlotte

9800 Kinsey Ave. Ste 100, Huntersville, NC 28078
Louisiana/NELAP Certification # LA170028
North Carolina Drinking Water Certification #: 37706
North Carolina Field Services Certification #: 5342
North Carolina Wastewater Certification #: 12

South Carolina Certification #: 99006001
Florida/NELAP Certification #: E87627
Kentucky UST Certification #: 84
Virginia/VELAP Certification #: 460221

Pace Analytical Services Asheville

2225 Riverside Drive, Asheville, NC 28804
Florida/NELAP Certification #: E87648
North Carolina Drinking Water Certification #: 37712

North Carolina Wastewater Certification #: 40
South Carolina Certification #: 99030001
Virginia/VELAP Certification #: 460222

Pace Analytical Services Peachtree Corners

110 Technology Pkwy, Peachtree Corners, GA 30092
Florida DOH Certification #: E87315
Georgia DW Inorganics Certification #: 812

North Carolina Certification #: 381
South Carolina Certification #: 98011001

REPORT OF LABORATORY ANALYSIS

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SAMPLE SUMMARY

Project: MCDONOUGH UPGRADIENT
Pace Project No.: 92560138

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92560138001	DGWA-71	Water	09/08/21 14:40	09/09/21 08:45
92560138002	DGWA-53	Water	09/09/21 12:29	09/10/21 17:40
92560138003	DGWA-70A	Water	09/09/21 14:56	09/10/21 17:40

REPORT OF LABORATORY ANALYSIS

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SAMPLE ANALYTE COUNT

Project: MCDONOUGH UPGRADIENT

Pace Project No.: 92560138

Lab ID	Sample ID	Method	Analysts	Analytes Reported
92560138001	DGWA-71	EPA 6010D	KH	1
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2011	ALW	1
		EPA 300.0 Rev 2.1 1993	CDC	3
92560138002	DGWA-53	EPA 6010D	DRB	1
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2011	ALW	1
		EPA 300.0 Rev 2.1 1993	CDC	3
92560138003	DGWA-70A	EPA 6010D	DRB	1
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2011	ALW	1
		EPA 300.0 Rev 2.1 1993	CDC	3

PASI-A = Pace Analytical Services - Asheville

PASI-C = Pace Analytical Services - Charlotte

PASI-GA = Pace Analytical Services - Peachtree Corners, GA

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: MCDONOUGH UPGRADIENT

Pace Project No.: 92560138

Sample: DGWA-71		Lab ID: 92560138001		Collected: 09/08/21 14:40		Received: 09/09/21 08:45		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data									
Analytical Method: Pace Analytical Services - Charlotte									
Performed by	CUSTOMER				1		09/09/21 10:15		
pH	5.76	Std. Units			1		09/09/21 10:15		
6010D ATL ICP									
Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA									
Calcium	6.1	mg/L	1.0	0.12	1	09/11/21 09:00	09/13/21 16:43	7440-70-2	
6020 MET ICPMS									
Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA									
Antimony	ND	mg/L	0.0030	0.00078	1	09/11/21 09:00	09/14/21 19:08	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0011	1	09/11/21 09:00	09/14/21 19:08	7440-38-2	
Barium	0.025	mg/L	0.0050	0.00067	1	09/11/21 09:00	09/14/21 19:08	7440-39-3	
Beryllium	0.000091J	mg/L	0.00050	0.000054	1	09/11/21 09:00	09/14/21 19:08	7440-41-7	
Boron	ND	mg/L	0.040	0.0086	1	09/11/21 09:00	09/14/21 19:08	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	09/11/21 09:00	09/14/21 19:08	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	09/11/21 09:00	09/14/21 19:08	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00039	1	09/11/21 09:00	09/14/21 19:08	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	09/11/21 09:00	09/14/21 19:08	7439-92-1	
Lithium	0.0013J	mg/L	0.030	0.00073	1	09/11/21 09:00	09/14/21 19:08	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	09/11/21 09:00	09/14/21 19:08	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	09/11/21 09:00	09/14/21 19:08	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	09/11/21 09:00	09/14/21 19:08	7440-28-0	
7470 Mercury									
Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA									
Mercury	0.000096J	mg/L	0.00020	0.000078	1	09/21/21 07:00	09/21/21 12:09	7439-97-6	
2540C Total Dissolved Solids									
Analytical Method: SM 2540C-2011 Pace Analytical Services - Peachtree Corners, GA									
Total Dissolved Solids	75.0	mg/L	10.0	10.0	1		09/15/21 18:56		
300.0 IC Anions 28 Days									
Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville									
Chloride	5.9	mg/L	1.0	0.60	1		09/14/21 18:43	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		09/14/21 18:43	16984-48-8	
Sulfate	6.1	mg/L	1.0	0.50	1		09/14/21 18:43	14808-79-8	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: MCDONOUGH UPGRADIENT

Pace Project No.: 92560138

Sample: DGWA-53		Lab ID: 92560138002		Collected: 09/09/21 12:29		Received: 09/10/21 17:40		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data									
Analytical Method: Pace Analytical Services - Charlotte									
Performed by	CUSTOMER				1		09/13/21 08:32		
pH	6.41	Std. Units			1		09/13/21 08:32		
6010D ATL ICP									
Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA									
Calcium	18.3	mg/L	1.0	0.12	1	09/17/21 11:09	09/17/21 18:31	7440-70-2	M1
6020 MET ICPMS									
Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA									
Antimony	ND	mg/L	0.0030	0.00078	1	09/17/21 11:11	09/17/21 15:49	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0011	1	09/17/21 11:11	09/17/21 15:49	7440-38-2	
Barium	0.099	mg/L	0.0050	0.00067	1	09/17/21 11:11	09/17/21 15:49	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	09/17/21 11:11	09/17/21 15:49	7440-41-7	
Boron	0.065	mg/L	0.040	0.0086	1	09/17/21 11:11	09/17/21 15:49	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	09/17/21 11:11	09/17/21 15:49	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	09/17/21 11:11	09/17/21 15:49	7440-47-3	
Cobalt	0.0064	mg/L	0.0050	0.00039	1	09/17/21 11:11	09/17/21 15:49	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	09/17/21 11:11	09/17/21 15:49	7439-92-1	
Lithium	0.0091J	mg/L	0.030	0.00073	1	09/17/21 11:11	09/17/21 15:49	7439-93-2	
Molybdenum	0.025	mg/L	0.010	0.00074	1	09/17/21 11:11	09/17/21 15:49	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	09/17/21 11:11	09/17/21 15:49	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	09/17/21 11:11	09/17/21 15:49	7440-28-0	
7470 Mercury									
Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA									
Mercury	ND	mg/L	0.00020	0.000078	1	09/21/21 07:00	09/21/21 12:17	7439-97-6	
2540C Total Dissolved Solids									
Analytical Method: SM 2540C-2011 Pace Analytical Services - Peachtree Corners, GA									
Total Dissolved Solids	131	mg/L	10.0	10.0	1		09/15/21 18:58		
300.0 IC Anions 28 Days									
Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville									
Chloride	1.8	mg/L	1.0	0.60	1		09/15/21 05:52	16887-00-6	
Fluoride	0.099J	mg/L	0.10	0.050	1		09/15/21 05:52	16984-48-8	
Sulfate	11.9	mg/L	1.0	0.50	1		09/15/21 05:52	14808-79-8	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: MCDONOUGH UPGRADIENT
Pace Project No.: 92560138

Sample: DGWA-70A		Lab ID: 92560138003		Collected: 09/09/21 14:56		Received: 09/10/21 17:40		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data									
Analytical Method: Pace Analytical Services - Charlotte									
Performed by	CUSTOMER				1		09/13/21 08:33		
pH	5.50	Std. Units			1		09/13/21 08:33		
6010D ATL ICP									
Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA									
Calcium	5.3	mg/L	1.0	0.12	1	09/17/21 11:09	09/17/21 19:00	7440-70-2	
6020 MET ICPMS									
Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA									
Antimony	0.0015J	mg/L	0.0030	0.00078	1	09/17/21 11:11	09/17/21 16:11	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0011	1	09/17/21 11:11	09/17/21 16:11	7440-38-2	
Barium	0.038	mg/L	0.0050	0.00067	1	09/17/21 11:11	09/17/21 16:11	7440-39-3	
Beryllium	0.000089J	mg/L	0.00050	0.000054	1	09/17/21 11:11	09/17/21 16:11	7440-41-7	
Boron	ND	mg/L	0.040	0.0086	1	09/17/21 11:11	09/17/21 16:11	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	09/17/21 11:11	09/17/21 16:11	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	09/17/21 11:11	09/17/21 16:11	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00039	1	09/17/21 11:11	09/17/21 16:11	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	09/17/21 11:11	09/17/21 16:11	7439-92-1	
Lithium	ND	mg/L	0.030	0.00073	1	09/17/21 11:11	09/17/21 16:11	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	09/17/21 11:11	09/17/21 16:11	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	09/17/21 11:11	09/17/21 16:11	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	09/17/21 11:11	09/17/21 16:11	7440-28-0	
7470 Mercury									
Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA									
Mercury	ND	mg/L	0.00020	0.000078	1	09/24/21 09:45	09/27/21 15:38	7439-97-6	
2540C Total Dissolved Solids									
Analytical Method: SM 2540C-2011 Pace Analytical Services - Peachtree Corners, GA									
Total Dissolved Solids	53.0	mg/L	10.0	10.0	1		09/15/21 18:58		
300.0 IC Anions 28 Days									
Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville									
Chloride	1.9	mg/L	1.0	0.60	1		09/15/21 06:07	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		09/15/21 06:07	16984-48-8	
Sulfate	ND	mg/L	1.0	0.50	1		09/15/21 06:07	14808-79-8	

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: MCDONOUGH UPGRADIENT
Pace Project No.: 92560138

QC Batch: 646610	Analysis Method: EPA 6010D
QC Batch Method: EPA 3010A	Analysis Description: 6010D ATL
Associated Lab Samples: 92560138001	Laboratory: Pace Analytical Services - Peachtree Corners, GA

METHOD BLANK: 3391819 Matrix: Water
Associated Lab Samples: 92560138001

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Calcium	mg/L	ND	1.0	0.12	09/13/21 14:48	

LABORATORY CONTROL SAMPLE: 3391820

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Calcium	mg/L	1	1.1	107	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3391821 3391822

Parameter	Units	92558259010		3391821		3391822		% Rec Limits	RPD	Max RPD	Qual	
		MS Result	MSD Spike Conc.	MS Result	MSD Spike Conc.	MS Result	MSD Spike Conc.					
Calcium	mg/L	1.4	1	1	1	2.5	2.5	106	109	75-125	1	20

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QUALITY CONTROL DATA

Project: MCDONOUGH UPGRADIENT

Pace Project No.: 92560138

QC Batch: 648035

Analysis Method: EPA 6010D

QC Batch Method: EPA 3010A

Analysis Description: 6010D ATL

Laboratory: Pace Analytical Services - Peachtree Corners, GA

Associated Lab Samples: 92560138002, 92560138003

METHOD BLANK: 3398813

Matrix: Water

Associated Lab Samples: 92560138002, 92560138003

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Calcium	mg/L	ND	1.0	0.12	09/17/21 18:21	

LABORATORY CONTROL SAMPLE: 3398814

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Calcium	mg/L	1	1.0	103	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3398815 3398816

Parameter	Units	3398815		3398816		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result						
Calcium	mg/L	18.3	1	1	18.8	19.3	57	102	75-125	2	20 M1

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QUALITY CONTROL DATA

Project: MCDONOUGH UPGRADIENT

Pace Project No.: 92560138

QC Batch: 646612

Analysis Method: EPA 6020B

QC Batch Method: EPA 3005A

Analysis Description: 6020 MET

Laboratory: Pace Analytical Services - Peachtree Corners, GA

Associated Lab Samples: 92560138001

METHOD BLANK: 3391827

Matrix: Water

Associated Lab Samples: 92560138001

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	mg/L	ND	0.0030	0.00078	09/14/21 17:25	
Arsenic	mg/L	ND	0.0050	0.0011	09/14/21 17:25	
Barium	mg/L	ND	0.0050	0.00067	09/14/21 17:25	
Beryllium	mg/L	ND	0.00050	0.000054	09/14/21 17:25	
Boron	mg/L	ND	0.040	0.0086	09/14/21 17:25	
Cadmium	mg/L	ND	0.00050	0.00011	09/14/21 17:25	
Chromium	mg/L	ND	0.0050	0.0011	09/14/21 17:25	
Cobalt	mg/L	ND	0.0050	0.00039	09/14/21 17:25	
Lead	mg/L	ND	0.0010	0.00089	09/14/21 17:25	
Lithium	mg/L	ND	0.030	0.00073	09/14/21 17:25	
Molybdenum	mg/L	ND	0.010	0.00074	09/14/21 17:25	
Selenium	mg/L	ND	0.0050	0.0014	09/14/21 17:25	
Thallium	mg/L	ND	0.0010	0.00018	09/14/21 17:25	

LABORATORY CONTROL SAMPLE: 3391828

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	mg/L	0.1	0.099	99	80-120	
Arsenic	mg/L	0.1	0.099	99	80-120	
Barium	mg/L	0.1	0.096	96	80-120	
Beryllium	mg/L	0.1	0.098	98	80-120	
Boron	mg/L	1	1.0	101	80-120	
Cadmium	mg/L	0.1	0.095	95	80-120	
Chromium	mg/L	0.1	0.094	94	80-120	
Cobalt	mg/L	0.1	0.097	97	80-120	
Lead	mg/L	0.1	0.094	94	80-120	
Lithium	mg/L	0.1	0.099	99	80-120	
Molybdenum	mg/L	0.1	0.098	98	80-120	
Selenium	mg/L	0.1	0.098	98	80-120	
Thallium	mg/L	0.1	0.094	94	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3391829 3391830

Parameter	Units	92559417001 Result	MS		MSD		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
			Spike Conc.	MSD Spike Conc.	MS Result	MSD Result						
Antimony	mg/L	ND	0.1	0.1	0.10	0.10	101	100	75-125	1	20	
Arsenic	mg/L	ND	0.1	0.1	0.10	0.099	100	98	75-125	1	20	

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QUALITY CONTROL DATA

Project: MCDONOUGH UPGRADIENT

Pace Project No.: 92560138

Parameter	Units	3391829		3391830		MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		92559417001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result								
Barium	mg/L	0.028	0.1	0.1	0.13	0.13	98	99	75-125	0	20		
Beryllium	mg/L	0.00016J	0.1	0.1	0.097	0.099	97	98	75-125	2	20		
Boron	mg/L	1.2	1	1	2.3	2.5	92	116	75-125	10	20		
Cadmium	mg/L	ND	0.1	0.1	0.096	0.095	96	95	75-125	1	20		
Chromium	mg/L	ND	0.1	0.1	0.10	0.10	102	101	75-125	0	20		
Cobalt	mg/L	ND	0.1	0.1	0.10	0.098	101	98	75-125	4	20		
Lead	mg/L	ND	0.1	0.1	0.094	0.095	94	95	75-125	1	20		
Lithium	mg/L	0.0014J	0.1	0.1	0.099	0.10	98	102	75-125	4	20		
Molybdenum	mg/L	ND	0.1	0.1	0.10	0.10	102	102	75-125	1	20		
Selenium	mg/L	0.021	0.1	0.1	0.12	0.12	100	101	75-125	1	20		
Thallium	mg/L	ND	0.1	0.1	0.095	0.097	95	97	75-125	2	20		

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QUALITY CONTROL DATA

Project: MCDONOUGH UPGRADIENT

Pace Project No.: 92560138

QC Batch: 648036

Analysis Method: EPA 6020B

QC Batch Method: EPA 3005A

Analysis Description: 6020 MET

Laboratory: Pace Analytical Services - Peachtree Corners, GA

Associated Lab Samples: 92560138002, 92560138003

METHOD BLANK: 3398822

Matrix: Water

Associated Lab Samples: 92560138002, 92560138003

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	mg/L	ND	0.0030	0.00078	09/17/21 15:37	
Arsenic	mg/L	ND	0.0050	0.0011	09/17/21 15:37	
Barium	mg/L	ND	0.0050	0.00067	09/17/21 15:37	
Beryllium	mg/L	ND	0.00050	0.000054	09/17/21 15:37	
Boron	mg/L	ND	0.040	0.0086	09/17/21 15:37	
Cadmium	mg/L	ND	0.00050	0.00011	09/17/21 15:37	
Chromium	mg/L	ND	0.0050	0.0011	09/17/21 15:37	
Cobalt	mg/L	ND	0.0050	0.00039	09/17/21 15:37	
Lead	mg/L	ND	0.0010	0.00089	09/17/21 15:37	
Lithium	mg/L	ND	0.030	0.00073	09/17/21 15:37	
Molybdenum	mg/L	ND	0.010	0.00074	09/17/21 15:37	
Selenium	mg/L	ND	0.0050	0.0014	09/17/21 15:37	
Thallium	mg/L	ND	0.0010	0.00018	09/17/21 15:37	

LABORATORY CONTROL SAMPLE: 3398823

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	mg/L	0.1	0.10	100	80-120	
Arsenic	mg/L	0.1	0.097	97	80-120	
Barium	mg/L	0.1	0.097	97	80-120	
Beryllium	mg/L	0.1	0.097	97	80-120	
Boron	mg/L	1	1.0	101	80-120	
Cadmium	mg/L	0.1	0.099	99	80-120	
Chromium	mg/L	0.1	0.096	96	80-120	
Cobalt	mg/L	0.1	0.10	101	80-120	
Lead	mg/L	0.1	0.095	95	80-120	
Lithium	mg/L	0.1	0.10	101	80-120	
Molybdenum	mg/L	0.1	0.10	101	80-120	
Selenium	mg/L	0.1	0.096	96	80-120	
Thallium	mg/L	0.1	0.094	94	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3398824 3398825

Parameter	Units	92560138002 Result	MS		MSD		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
			Spike Conc.	MSD Spike Conc.	MS Result	MSD Result						
Antimony	mg/L	ND	0.1	0.1	0.10	0.10	104	103	75-125	0	20	
Arsenic	mg/L	ND	0.1	0.1	0.10	0.099	100	98	75-125	2	20	

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QUALITY CONTROL DATA

Project: MCDONOUGH UPGRADIENT

Pace Project No.: 92560138

Parameter	Units	3398824		3398825		MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		92560138002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result								
Barium	mg/L	0.099	0.1	0.1	0.21	0.20	114	102	75-125	6	20		
Beryllium	mg/L	ND	0.1	0.1	0.091	0.096	91	96	75-125	5	20		
Boron	mg/L	0.065	1	1	0.97	1.0	91	97	75-125	6	20		
Cadmium	mg/L	ND	0.1	0.1	0.10	0.099	101	99	75-125	2	20		
Chromium	mg/L	ND	0.1	0.1	0.10	0.10	103	100	75-125	3	20		
Cobalt	mg/L	0.0064	0.1	0.1	0.11	0.10	105	98	75-125	7	20		
Lead	mg/L	ND	0.1	0.1	0.099	0.099	99	98	75-125	0	20		
Lithium	mg/L	0.0091J	0.1	0.1	0.10	0.11	94	99	75-125	5	20		
Molybdenum	mg/L	0.025	0.1	0.1	0.13	0.12	101	99	75-125	2	20		
Selenium	mg/L	ND	0.1	0.1	0.093	0.095	92	95	75-125	3	20		
Thallium	mg/L	ND	0.1	0.1	0.10	0.10	100	100	75-125	0	20		

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QUALITY CONTROL DATA

Project: MCDONOUGH UPGRADIENT

Pace Project No.: 92560138

QC Batch: 648337

Analysis Method: EPA 7470A

QC Batch Method: EPA 7470A

Analysis Description: 7470 Mercury

Laboratory: Pace Analytical Services - Peachtree Corners, GA

Associated Lab Samples: 92560138001, 92560138002

METHOD BLANK: 3400307

Matrix: Water

Associated Lab Samples: 92560138001, 92560138002

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	mg/L	ND	0.00020	0.000078	09/21/21 12:04	

LABORATORY CONTROL SAMPLE: 3400308

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	mg/L	0.0025	0.0025	98	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3400309 3400310

Parameter	Units	92561283001		3400310		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result						
Mercury	mg/L	ND	0.0025	0.0025	0.0026	0.0024	103	96	75-125	7	20

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QUALITY CONTROL DATA

Project: MCDONOUGH UPGRADIENT
Pace Project No.: 92560138

QC Batch: 649458	Analysis Method: EPA 7470A
QC Batch Method: EPA 7470A	Analysis Description: 7470 Mercury
Associated Lab Samples: 92560138003	Laboratory: Pace Analytical Services - Peachtree Corners, GA

METHOD BLANK: 3406292 Matrix: Water
Associated Lab Samples: 92560138003

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	mg/L	ND	0.00020	0.000078	09/27/21 15:32	

LABORATORY CONTROL SAMPLE: 3406293

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	mg/L	0.0025	0.0028	113	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3406294 3406295

Parameter	Units	3406294		3406295		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result						
Mercury	mg/L	ND	0.0025	0.0027	0.0027	108	105	75-125	3	20	

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QUALITY CONTROL DATA

Project: MCDONOUGH UPGRADIENT

Pace Project No.: 92560138

QC Batch:	647027	Analysis Method:	SM 2540C-2011
QC Batch Method:	SM 2540C-2011	Analysis Description:	2540C Total Dissolved Solids
		Laboratory:	Pace Analytical Services - Peachtree Corners, GA

Associated Lab Samples: 92560138001, 92560138002, 92560138003

METHOD BLANK: 3393790 Matrix: Water

Associated Lab Samples: 92560138001, 92560138002, 92560138003

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	ND	10.0	10.0	09/15/21 18:56	

LABORATORY CONTROL SAMPLE: 3393791

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	400	390	98	90-111	

SAMPLE DUPLICATE: 3393792

Parameter	Units	92560138001 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	75.0	78.0	4	10	

SAMPLE DUPLICATE: 3393793

Parameter	Units	92560281005 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	133	139	4	10	

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QUALITY CONTROL DATA

Project: MCDONOUGH UPGRADIENT
Pace Project No.: 92560138

QC Batch: 646605 Analysis Method: EPA 300.0 Rev 2.1 1993
QC Batch Method: EPA 300.0 Rev 2.1 1993 Analysis Description: 300.0 IC Anions
Laboratory: Pace Analytical Services - Asheville

Associated Lab Samples: 92560138001

METHOD BLANK: 3391813 Matrix: Water
Associated Lab Samples: 92560138001

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	0.60	09/13/21 00:59	
Fluoride	mg/L	ND	0.10	0.050	09/13/21 00:59	
Sulfate	mg/L	ND	1.0	0.50	09/13/21 00:59	

LABORATORY CONTROL SAMPLE: 3391814

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	50	47.8	96	90-110	
Fluoride	mg/L	2.5	2.4	98	90-110	
Sulfate	mg/L	50	49.2	98	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3391815 3391816

Parameter	Units	MS		MSD		MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		92560365001 Result	Spike Conc.	Spike Conc.	Conc.								
Chloride	mg/L	8.8	50	50	50	60.2	60.8	103	104	90-110	1	10	
Fluoride	mg/L	0.12	2.5	2.5	2.5	2.7	2.8	104	105	90-110	1	10	
Sulfate	mg/L	11.1	50	50	50	63.3	63.9	104	106	90-110	1	10	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3391817 3391818

Parameter	Units	MS		MSD		MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		92560722009 Result	Spike Conc.	Spike Conc.	Conc.								
Chloride	mg/L	186	50	50	50	233	234	94	96	90-110	0	10	
Fluoride	mg/L	0.24	2.5	2.5	2.5	2.9	2.9	107	108	90-110	1	10	
Sulfate	mg/L	168	50	50	50	189	190	41	43	90-110	1	10 M1	

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QUALITY CONTROL DATA

Project: MCDONOUGH UPGRADIENT
Pace Project No.: 92560138

QC Batch: 647162 Analysis Method: EPA 300.0 Rev 2.1 1993
QC Batch Method: EPA 300.0 Rev 2.1 1993 Analysis Description: 300.0 IC Anions
Laboratory: Pace Analytical Services - Asheville

Associated Lab Samples: 92560138002, 92560138003

METHOD BLANK: 3394748 Matrix: Water
Associated Lab Samples: 92560138002, 92560138003

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	0.60	09/14/21 22:53	
Fluoride	mg/L	ND	0.10	0.050	09/14/21 22:53	
Sulfate	mg/L	ND	1.0	0.50	09/14/21 22:53	

LABORATORY CONTROL SAMPLE: 3394749

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	50	50.4	101	90-110	
Fluoride	mg/L	2.5	2.4	97	90-110	
Sulfate	mg/L	50	50.9	102	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3394750 3394751

Parameter	Units	92560938001		3394750		3394751		% Rec Limits	RPD	Max RPD	Qual
		MS Result	MSD Spike Conc.	MS Result	MSD Spike Conc.	MS Result	MSD Spike Conc.				
Chloride	mg/L	3.0	50	50	58.4	61.9	111	118	90-110	6	10 M1
Fluoride	mg/L	0.091J	2.5	2.5	3.4	3.5	131	134	90-110	2	10 M1
Sulfate	mg/L	33.4	50	50	88.5	91.8	110	117	90-110	4	10 M1

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3394752 3394753

Parameter	Units	92560676003		3394752		3394753		% Rec Limits	RPD	Max RPD	Qual
		MS Result	MSD Spike Conc.	MS Result	MSD Spike Conc.	MS Result	MSD Spike Conc.				
Chloride	mg/L	146	50	50	196	198	99	105	90-110	1	10
Fluoride	mg/L	0.29	2.5	2.5	4.9	4.8	184	179	90-110	2	10 M1
Sulfate	mg/L	140	50	50	193	195	105	109	90-110	1	10

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3394754 3394755

Parameter	Units	92560676001		3394754		3394755		% Rec Limits	RPD	Max RPD	Qual
		MS Result	MSD Spike Conc.	MS Result	MSD Spike Conc.	MS Result	MSD Spike Conc.				
Chloride	mg/L	4.9	50	50	62.8	64.2	116	119	90-110	2	10 M1
Fluoride	mg/L	0.40	2.5	2.5	3.5	3.6	124	127	90-110	2	10 M1
Sulfate	mg/L	3.8	50	50	62.4	63.7	117	120	90-110	2	10 M1

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QUALIFIERS

Project: MCDONOUGH UPGRADIENT

Pace Project No.: 92560138

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

Acid preservation may not be appropriate for 2 Chloroethylvinyl ether.

A separate vial preserved to a pH of 4-5 is recommended in SW846 Chapter 4 for the analysis of Acrolein and Acrylonitrile by EPA Method 8260.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Reported results are not rounded until the final step prior to reporting. Therefore, calculated parameters that are typically reported as "Total" may vary slightly from the sum of the reported component parameters.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

ANALYTE QUALIFIERS

M1 Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: MCDONOUGH UPGRADIENT

Pace Project No.: 92560138

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92560138001	DGWA-71				
92560138002	DGWA-53				
92560138003	DGWA-70A				
92560138001	DGWA-71	EPA 3010A	646610	EPA 6010D	646635
92560138002	DGWA-53	EPA 3010A	648035	EPA 6010D	648116
92560138003	DGWA-70A	EPA 3010A	648035	EPA 6010D	648116
92560138001	DGWA-71	EPA 3005A	646612	EPA 6020B	646637
92560138002	DGWA-53	EPA 3005A	648036	EPA 6020B	648158
92560138003	DGWA-70A	EPA 3005A	648036	EPA 6020B	648158
92560138001	DGWA-71	EPA 7470A	648337	EPA 7470A	648433
92560138002	DGWA-53	EPA 7470A	648337	EPA 7470A	648433
92560138003	DGWA-70A	EPA 7470A	649458	EPA 7470A	649537
92560138001	DGWA-71	SM 2540C-2011	647027		
92560138002	DGWA-53	SM 2540C-2011	647027		
92560138003	DGWA-70A	SM 2540C-2011	647027		
92560138001	DGWA-71	EPA 300.0 Rev 2.1 1993	646605		
92560138002	DGWA-53	EPA 300.0 Rev 2.1 1993	647162		
92560138003	DGWA-70A	EPA 300.0 Rev 2.1 1993	647162		

REPORT OF LABORATORY ANALYSIS

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Laboratory receiving samples:

Asheville Eden Greenwood Huntersville Raleigh Mechanicsville Atlanta Kernersville

Sample Condition Upon Receipt

Client Name:

GA Power

Project #:

WO# : 92560138

Courier: Commercial Fed Ex UPS USPS Client
 Pace Other: _____



Custody Seal Present? Yes No Seals Intact? Yes No

Date/Initials Person Examining Contents: *9/9/21*

Packing Material: Bubble Wrap Bubble Bags None Other

Biological Tissue Frozen?

Yes No N/A

Thermometer: IR Gun ID: *214* Type of Ice: Wet Blue None

Cooler Temp: *2.6* Correction Factor: Add/Subtract (°C) *-0.1*

Temp should be above freezing to 6°C

Samples out of temp criteria. Samples on ice, cooling process has begun

Cooler Temp Corrected (°C): *2.5*

USDA Regulated Soil (N/A, water sample)

Did samples originate in a quarantine zone within the United States: CA, NY, or SC (check maps)?

Did samples originate from a foreign source (internationally, including Hawaii and Puerto Rico)? Yes No

Yes No

			Comments/Discrepancy:
Chain of Custody Present?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A		1.
Samples Arrived within Hold Time?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A		2.
Short Hold Time Analysis (<72 hr.)?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A		3.
Rush Turn Around Time Requested?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A		4.
Sufficient Volume?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A		5.
Correct Containers Used?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A		6.
-Pace Containers Used?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A		
Containers Intact?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A		7.
Dissolved analysis: Samples Field Filtered?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A		8.
Sample Labels Match COC?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A		9.
-Includes Date/Time/ID/Analysis Matrix:	<i>W</i>		
Headspace in VOA Vials (>5-6mm)?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A		10.
Trip Blank Present?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A		11.
Trip Blank Custody Seals Present?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A		

COMMENTS/SAMPLE DISCREPANCY

Field Data Required? Yes No

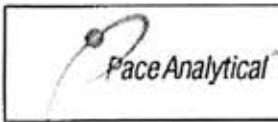
Lot ID of split containers:

CLIENT NOTIFICATION/RESOLUTION

Person contacted: _____ Date/Time: _____

Project Manager SCURF Review: _____ Date: _____

Project Manager SRF Review: _____ Date: _____



Document Name:
Sample Condition Upon Receipt(SCUR)
 Document No.:
F-CAR-CS-033-Rev.07

Document Revised: October 28, 2020
 Page 2 of 2
 Issuing Authority:
 Pace Carolinas Quality Office

*Check mark top half of box if pH and/or dechlorination is verified and within the acceptance range for preservation samples.

Exceptions: VOA, Coliform, TOC, Oil and Grease, DRO/8015 (water) DOC, LLHg

**Bottom half of box is to list number of bottles

Project #

WO# : 92560138

PM: NMG

Due Date: 09/23/21

CLIENT: GR-GA Power

Item#	BP4U-125 mL Plastic Unpreserved (N/A) (Cl-)	BP3U-250 mL Plastic Unpreserved (N/A)	BP2U-500 mL Plastic Unpreserved (N/A)	BP1U-1 liter Plastic Unpreserved (N/A)	BP4S-125 mL Plastic H2SO4 (pH < 2) (Cl-)	BP3N-250 mL plastic HNO3 (pH < 2)	BP4Z-125 mL Plastic Zn Acetate & NaOH (>9)	BP4C-125 mL Plastic NaOH (pH > 12) (Cl-)	WGFU-Wide-mouthed Glass jar Unpreserved	AG1U-1 liter Amber Unpreserved (N/A) (Cl-)	AG1H-1 liter Amber HCl (pH < 2)	AG3U-250 mL Amber Unpreserved (N/A) (Cl-)	AG1S-1 liter Amber H2SO4 (pH < 2)	AG3S-250 mL Amber H2SO4 (pH < 2)	AG3A(DG3A)-250 mL Amber NH4Cl (N/A)(Cl-)	DG9H-40 mL VOA HCl (N/A)	VG9T-40 mL VOA Na2S2O3 (N/A)	VG9U-40 mL VOA Unp (N/A)	DG9P-40 mL VOA H3PO4 (N/A)	VOAK (6 vials per kit)-5035 kit (N/A)	V/GK (3 vials per kit)-VPH/Gas kit (N/A)	SPST-125 mL Sterile Plastic (N/A - lab)	SP2T-250 mL Sterile Plastic (N/A - lab)	BP3A-250 mL Plastic (NH2)2SO4 (9.3-9.7)	AG0U-100 mL Amber Unpreserved vials (N/A)	V5GU-20 mL Scintillation vials (N/A)	DG9U-40 mL Amber Unpreserved vials (N/A)	
1	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
2	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	
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12	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	

pH Adjustment Log for Preserved Samples

Sample ID	Type of Preservative	pH upon receipt	Date preservation adjusted	Time preservation adjusted	Amount of Preservative added	Lot #

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. Out of hold, incorrect preservative, out of temp, incorrect containers.



Document Name:
Sample Condition Upon Receipt (SCUR)
 Document No.:
F-CAR-CS-033-Rev.07

Document Revised: October 28, 2020
 Page 1 of 2
 Issuing Authority:
 Pace Carolinas Quality Office

Laboratory receiving samples:

Asheville Eden Greenwood Huntersville Raleigh Mechanicsville Atlanta Kernersville

Sample Condition Upon Receipt

Client Name:

Georgia Power

Project #:

Courier: Fed Ex UPS USPS Client
 Commercial Pace Other: _____

Custody Seal Present? Yes No Seals Intact? Yes No

Date/Initials Person Examining Contents: MT 9/10/21

Packing Material: Bubble Wrap Bubble Bags None Other

Biological Tissue Frozen?

Thermometer: IR Gun ID: 230 Type of Ice: Wet Blue None

Yes No N/A

Cooler Temp: 3.4 Correction Factor: Add/Subtract (°C) ± 0.1

Temp should be above freezing to 6°C

Samples out of temp criteria. Samples on ice, cooling process has begun

Cooler Temp Corrected (°C): 3.5

USDA Regulated Soil (N/A, water sample)

Did samples originate in a quarantine zone within the United States: CA, NY, or SC (check maps)?

Did samples originate from a foreign source (internationally, including Hawaii and Puerto Rico)?

Yes No

Yes No

Comments/Discrepancy:

Chain of Custody Present?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>	1.
Samples Arrived within Hold Time?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>	2.
Short Hold Time Analysis (<72 hr.)?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A <input type="checkbox"/>	3.
Rush Turn Around Time Requested?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A <input type="checkbox"/>	4.
Sufficient Volume?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>	5.
Correct Containers Used?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>	6.
-Pace Containers Used?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>	
Containers Intact?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>	7.
Dissolved analysis: Samples Field Filtered?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A <input type="checkbox"/>	8.
Sample Labels Match COC?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>	9.
-Includes Date/Time/ID/Analysis Matrix: <u>WT</u>		
Headspace in VOA Vials (>5-6mm)?	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input checked="" type="checkbox"/>	10.
Trip Blank Present?	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input checked="" type="checkbox"/>	11.
Trip Blank Custody Seals Present?	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input checked="" type="checkbox"/>	

COMMENTS/SAMPLE DISCREPANCY

Field Data Required? Yes No

Lot ID of split containers:

CLIENT NOTIFICATION/RESOLUTION

Person contacted: _____ Date/Time: _____

Project Manager SCURF Review: _____

Date: _____

Project Manager SRF Review: _____

Date: _____

*Check mark top half of box if pH and/or dechlorination is verified and within the acceptance range for preservation samples.

Project #

Exceptions: VOA, Coliform, TOC, Oil and Grease, DRO/8015 (water) DOC, LLHg

**Bottom half of box is to list number of bottles

Item#	BP4U-125 mL Plastic Unpreserved (N/A) (Cl-)	BP3U-250 mL Plastic Unpreserved (N/A)	BP2U-500 mL Plastic Unpreserved (N/A)	BP1U-1 liter Plastic Unpreserved (N/A)	BP4S-125 mL Plastic H2SO4 (pH < 2) (Cl-)	BP3N-250 mL plastic HNO3 (pH < 2)	BP4Z-125 mL Plastic Zn Acetate & NaOH (>9)	BP4C-125 mL Plastic NaOH (pH > 12) (Cl-)	WGFU-Wide-mouthed Glass Jar Unpreserved	AG1U-1 liter Amber Unpreserved (N/A) (Cl-)	AG1H-1 liter Amber HCl (pH < 2)	AG3U-250 mL Amber Unpreserved (N/A) (Cl-)	AG1S-1 liter Amber H2SO4 (pH < 2)	AG3S-250 mL Amber H2SO4 (pH < 2)	AG3A(DG3A)-250 mL Amber NH4Cl (N/A)(Cl-)	DG9H-40 mL VOA HCl (N/A)	VG9T-40 mL VOA Na2S2O3 (N/A)	VG9U-40 mL VOA Unp (N/A)	DG9P-40 mL VOA H3PO4 (N/A)	VOAK (6 vials per kit)-S035 kit (N/A)	V/GK (3 vials per kit)-VPH/Gas kit (N/A)	SPST-125 mL Sterile Plastic (N/A - lab)	SPZT-250 mL Sterile Plastic (N/A - lab)	BP3A-250 mL Plastic (NH2)2SO4 (9.3-9.7)	AG0U-100 mL Amber Unpreserved vials (N/A)	VSGU-20 mL Scintillation vials (N/A)	DG9U-40 mL Amber Unpreserved vials (N/A)	
1	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
2	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
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12	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/

BPIN

N/C

pH Adjustment Log for Preserved Samples						
Sample ID	Type of Preservative	pH upon receipt	Date preservation adjusted	Time preservation adjusted	Amount of Preservative added	Lot #

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. Out of hold, incorrect preservative, out of temp, incorrect containers.

October 22, 2021

Joju Abraham
Georgia Power-CCR
2480 Maner Road
Atlanta, GA 30339

RE: Project: MCDONOUGH UPGRADIENT RADS
Pace Project No.: 92560136

Dear Joju Abraham:

Enclosed are the analytical results for sample(s) received by the laboratory between September 09, 2021 and September 10, 2021. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

- Pace Analytical Services - Greensburg

If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Nicole D'Oleo
nicole.d'oleo@pacelabs.com
(704)875-9092
Project Manager

Enclosures

cc: Stephen Benda
Daniela Herrera, Golder
Ben Hodges, Georgia Power
Kristen Jurinko
J. Shelby Mobley
Charles Norton, Southern Company
Ms. Lauren Petty, Southern Company
Dawn Prell, Golder Associates Inc.
Tim Richards, Golder Associates - Atlanta



REPORT OF LABORATORY ANALYSIS

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CERTIFICATIONS

Project: MCDONOUGH UPGRADIENT RADS
Pace Project No.: 92560136

Pace Analytical Services Pennsylvania

1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601
ANAB DOD-ELAP Rad Accreditation #: L2417
Alabama Certification #: 41590
Arizona Certification #: AZ0734
Arkansas Certification
California Certification #: 04222CA
Colorado Certification #: PA01547
Connecticut Certification #: PH-0694
Delaware Certification
EPA Region 4 DW Rad
Florida/TNI Certification #: E87683
Georgia Certification #: C040
Florida: Cert E871149 SEKS WET
Guam Certification
Hawaii Certification
Idaho Certification
Illinois Certification
Indiana Certification
Iowa Certification #: 391
Kansas/TNI Certification #: E-10358
Kentucky Certification #: KY90133
KY WW Permit #: KY0098221
KY WW Permit #: KY0000221
Louisiana DHH/TNI Certification #: LA180012
Louisiana DEQ/TNI Certification #: 4086
Maine Certification #: 2017020
Maryland Certification #: 308
Massachusetts Certification #: M-PA1457
Michigan/PADEP Certification #: 9991

Missouri Certification #: 235
Montana Certification #: Cert0082
Nebraska Certification #: NE-OS-29-14
Nevada Certification #: PA014572018-1
New Hampshire/TNI Certification #: 297617
New Jersey/TNI Certification #: PA051
New Mexico Certification #: PA01457
New York/TNI Certification #: 10888
North Carolina Certification #: 42706
North Dakota Certification #: R-190
Ohio EPA Rad Approval: #41249
Oregon/TNI Certification #: PA200002-010
Pennsylvania/TNI Certification #: 65-00282
Puerto Rico Certification #: PA01457
Rhode Island Certification #: 65-00282
South Dakota Certification
Tennessee Certification #: 02867
Texas/TNI Certification #: T104704188-17-3
Utah/TNI Certification #: PA014572017-9
USDA Soil Permit #: P330-17-00091
Vermont Dept. of Health: ID# VT-0282
Virgin Island/PADEP Certification
Virginia/VELAP Certification #: 9526
Washington Certification #: C868
West Virginia DEP Certification #: 143
West Virginia DHHR Certification #: 9964C
Wisconsin Approve List for Rad
Wyoming Certification #: 8TMS-L

REPORT OF LABORATORY ANALYSIS

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SAMPLE SUMMARY

Project: MCDONOUGH UPGRADIENT RADS

Pace Project No.: 92560136

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92560136001	DGWA-71	Water	09/08/21 14:40	09/09/21 08:45
92560136002	DGWA-53	Water	09/09/21 12:29	09/10/21 17:40
92560136003	DGWA-70A	Water	09/09/21 14:56	09/10/21 17:40

REPORT OF LABORATORY ANALYSIS

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SAMPLE ANALYTE COUNT

Project: MCDONOUGH UPGRADIENT RADS

Pace Project No.: 92560136

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
92560136001	DGWA-71	EPA 9315	CLA	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92560136002	DGWA-53	EPA 9315	SLC	1	PASI-PA
		EPA 9320	JC2	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92560136003	DGWA-70A	EPA 9315	SLC	1	PASI-PA
		EPA 9320	JC2	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA

PASI-PA = Pace Analytical Services - Greensburg

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: MCDONOUGH UPGRADIENT RADS

Pace Project No.: 92560136

Sample: DGWA-71 **Lab ID: 92560136001** Collected: 09/08/21 14:40 Received: 09/09/21 08:45 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Pace Analytical Services - Greensburg						
Radium-226	EPA 9315	0.0510 ± 0.152 (0.378) C:99% T:NA	pCi/L	10/06/21 12:02	13982-63-3	
Pace Analytical Services - Greensburg						
Radium-228	EPA 9320	-0.185 ± 0.324 (0.789) C:67% T:102%	pCi/L	10/04/21 15:05	15262-20-1	
Pace Analytical Services - Greensburg						
Total Radium	Total Radium Calculation	0.0510 ± 0.476 (1.17)	pCi/L	10/07/21 15:34	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: MCDONOUGH UPGRADIENT RADS

Pace Project No.: 92560136

Sample: **DGWA-53** Lab ID: **92560136002** Collected: 09/09/21 12:29 Received: 09/10/21 17:40 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	1.42 ± 0.444 (0.373) C:94% T:NA	pCi/L	10/06/21 08:25	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	1.30 ± 0.523 (0.809) C:66% T:86%	pCi/L	10/04/21 14:59	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	2.72 ± 0.967 (1.18)	pCi/L	10/06/21 15:27	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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without the written consent of Pace Analytical Services, LLC.

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: MCDONOUGH UPGRADIENT RADS

Pace Project No.: 92560136

Sample: **DGWA-70A** Lab ID: **92560136003** Collected: 09/09/21 14:56 Received: 09/10/21 17:40 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	-0.0648 ± 0.150 (0.456) C:97% T:NA	pCi/L	10/06/21 08:25	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	0.779 ± 0.425 (0.759) C:67% T:90%	pCi/L	10/04/21 14:59	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	0.779 ± 0.575 (1.22)	pCi/L	10/06/21 15:27	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL - RADIOCHEMISTRY

Project: MCDONOUGH UPGRADIENT RADS

Pace Project No.: 92560136

QC Batch: 465345

Analysis Method: EPA 9320

QC Batch Method: EPA 9320

Analysis Description: 9320 Radium 228

Laboratory: Pace Analytical Services - Greensburg

Associated Lab Samples: 92560136001

METHOD BLANK: 2247073

Matrix: Water

Associated Lab Samples: 92560136001

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.306 ± 0.283 (0.572) C:72% T:95%	pCi/L	10/04/21 11:58	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL - RADIOCHEMISTRY

Project: MCDONOUGH UPGRADIENT RADS

Pace Project No.: 92560136

QC Batch: 465347

Analysis Method: EPA 9315

QC Batch Method: EPA 9315

Analysis Description: 9315 Total Radium

Laboratory: Pace Analytical Services - Greensburg

Associated Lab Samples: 92560136001

METHOD BLANK: 2247077

Matrix: Water

Associated Lab Samples: 92560136001

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	-0.0279 ± 0.217 (0.589) C:92% T:NA	pCi/L	10/06/21 12:00	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL - RADIOCHEMISTRY

Project: MCDONOUGH UPGRADIENT RADS

Pace Project No.: 92560136

QC Batch: 465343

Analysis Method: EPA 9320

QC Batch Method: EPA 9320

Analysis Description: 9320 Radium 228

Laboratory: Pace Analytical Services - Greensburg

Associated Lab Samples: 92560136002, 92560136003

METHOD BLANK: 2247069

Matrix: Water

Associated Lab Samples: 92560136002, 92560136003

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.209 ± 0.287 (0.612) C:69% T:89%	pCi/L	10/04/21 11:58	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL - RADIOCHEMISTRY

Project: MCDONOUGH UPGRADIENT RADS

Pace Project No.: 92560136

QC Batch: 465344

Analysis Method: EPA 9315

QC Batch Method: EPA 9315

Analysis Description: 9315 Total Radium

Laboratory: Pace Analytical Services - Greensburg

Associated Lab Samples: 92560136002, 92560136003

METHOD BLANK: 2247072

Matrix: Water

Associated Lab Samples: 92560136002, 92560136003

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	0.00717 ± 0.168 (0.443) C:96% T:NA	pCi/L	10/06/21 08:19	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

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QUALIFIERS

Project: MCDONOUGH UPGRADIENT RADS
Pace Project No.: 92560136

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

Acid preservation may not be appropriate for 2 Chloroethylvinyl ether.

A separate vial preserved to a pH of 4-5 is recommended in SW846 Chapter 4 for the analysis of Acrolein and Acrylonitrile by EPA Method 8260.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Reported results are not rounded until the final step prior to reporting. Therefore, calculated parameters that are typically reported as "Total" may vary slightly from the sum of the reported component parameters.

Act - Activity

Unc - Uncertainty: SDWA = 1.96 sigma count uncertainty, all other matrices = Expanded Uncertainty (95% confidence interval).

Gamma Spec = Expanded Uncertainty (95.4% Confidence Interval)

(MDC) - Minimum Detectable Concentration

Trac - Tracer Recovery (%)

Carr - Carrier Recovery (%)

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

REPORT OF LABORATORY ANALYSIS

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without the written consent of Pace Analytical Services, LLC.

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: MCDONOUGH UPGRADIENT RADS

Pace Project No.: 92560136

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92560136001	DGWA-71	EPA 9315	465347		
92560136002	DGWA-53	EPA 9315	465344		
92560136003	DGWA-70A	EPA 9315	465344		
92560136001	DGWA-71	EPA 9320	465345		
92560136002	DGWA-53	EPA 9320	465343		
92560136003	DGWA-70A	EPA 9320	465343		
92560136001	DGWA-71	Total Radium Calculation	467213		
92560136002	DGWA-53	Total Radium Calculation	467011		
92560136003	DGWA-70A	Total Radium Calculation	467011		

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.



Document Name:
Sample Condition Upon Receipt(SCUR)
 Document No.:
F-CAR-CS-033-Rev.07

Document Revised: October 28, 2020
 Page 1 of 2
 Issuing Authority:
 Pace Carolinas Quality Office

Laboratory receiving samples:

Asheville Eden Greenwood Huntersville Raleigh Mechanicsville Atlanta Kernersville

Sample Condition
 Upon Receipt

Client Name:

GA Power

Project

WO# : 92560136

Courier: Commercial Fed Ex UPS USPS Client
 Pace Other: _____



92560136

Custody Seal Present? Yes No Seals Intact? Yes No

Date/Initials Person Examining Contents: *9/19/21*

Packing Material: Bubble Wrap Bubble Bags None Other

Biological Tissue Frozen? Yes No N/A

Thermometer: IR Gun ID: *214* Type of Ice: Wet Blue None

Cooler Temp: *2.6* Correction Factor: Add/Subtract (°C) *-0.1*

Temp should be above freezing to 6°C
 Samples out of temp criteria. Samples on ice, cooling process has begun

Cooler Temp Corrected (°C): *2.5*

USDA Regulated Soil (N/A, water sample)

Did samples originate in a quarantine zone within the United States: CA, NY, or SC (check maps)?
 Yes No

Did samples originate from a foreign source (internationally, including Hawaii and Puerto Rico)? Yes No

			Comments/Discrepancy:
Chain of Custody Present?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A		1.
Samples Arrived within Hold Time?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A		2.
Short Hold Time Analysis (<72 hr.)?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A		3.
Rush Turn Around Time Requested?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A		4.
Sufficient Volume?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A		5.
Correct Containers Used?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A		6.
-Pace Containers Used?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A		
Containers Intact?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A		7.
Dissolved analysis: Samples Field Filtered?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A		8.
Sample Labels Match COC?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A		9.
-Includes Date/Time/ID/Analysis Matrix:	<i>W</i>		
Headspace in VOA Vials (>5-6mm)?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A		10.
Trip Blank Present?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A		11.
Trip Blank Custody Seals Present?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A		

COMMENTS/SAMPLE DISCREPANCY

Field Data Required? Yes No

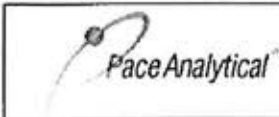
Lot ID of split containers:

CLIENT NOTIFICATION/RESOLUTION

Person contacted: _____ Date/Time: _____

Project Manager SCURF Review: _____ Date: _____

Project Manager SRF Review: _____ Date: _____



Document Name:
Sample Condition Upon Receipt(SCUR)

Document Revised: October 28, 2020
Page 2 of 2

Document No.:
F-CAR-CS-033-Rev.07

Issuing Authority:
Pace Carolinas Quality Office

*Check mark top half of box if pH and/or dechlorination is verified and within the acceptance range for preservation samples.

Project #

WO# : 92560136

PM: NMG

Due Date: 09/30/21

Exceptions: VOA, Coliform, TOC, Oil and Grease, DRO/8015 (water) DOC, LLHg

CLIENT: GA-GA Power

**Bottom half of box is to list number of bottles

Item#	BP4U-125 mL Plastic Unpreserved (N/A) (Cl-)	BP3U-250 mL Plastic Unpreserved (N/A)	BP2U-500 mL Plastic Unpreserved (N/A)	BP1U-1 liter Plastic Unpreserved (N/A)	BP4S-125 mL Plastic H2SO4 (pH < 2) (Cl-)	BP3N-250 mL plastic HNO3 (pH < 2)	BP4Z-125 mL Plastic ZN Acetate & NaOH (>9)	BP4C-125 mL Plastic NaOH (pH > 12) (Cl-)	WGFW-Wide-mouthed Glass jar Unpreserved	AG1U-1 liter Amber Unpreserved (N/A) (Cl-)	AG1H-1 liter Amber HCl (pH < 2)	AG3U-250 mL Amber Unpreserved (N/A) (Cl-)	AG1S-1 liter Amber H2SO4 (pH < 2)	AG3S-250 mL Amber H2SO4 (pH < 2)	AG3A(DG3A)-250 mL Amber NH4Cl (N/A)(Cl-)	DG9H-40 mL VOA HCl (N/A)	VG9T-40 mL VOA Na2S2O3 (N/A)	VG9U-40 mL VOA Unp (N/A)	DG9P-40 mL VOA H3PO4 (N/A)	VOAK (6 vials per kit)-5035 kit (N/A)	V/GK (3 vials per kit)-VPH/Gas kit (N/A)	SP5T-125 mL Sterile Plastic (N/A - lab)	SP2T-250 mL Sterile Plastic (N/A - lab)	BP3A-250 mL Plastic (NH2)2SO4 (9.3-9.7)	AG0U-100 mL Amber Unpreserved vials (N/A)	VSGU-20 mL Scintillation vials (N/A)	DGSU-40 mL Amber Unpreserved vials (N/A)		
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12																													

pH Adjustment Log for Preserved Samples

Sample ID	Type of Preservative	pH upon receipt	Date preservation adjusted	Time preservation adjusted	Amount of Preservative added	Lot #

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. Out of hold, incorrect preservative, out of temp, incorrect containers.



Document Name:
Sample Condition Upon Receipt (SCUR)
 Document No.:
F-CAR-CS-033-Rev.07

Document Revised: October 28, 2020
 Page 1 of 2
 Issuing Authority:
 Pace Carolinas Quality Office

Laboratory receiving samples:

Asheville Eden Greenwood Huntersville Raleigh Mechanicsville Atlanta Kernersville

Sample Condition Upon Receipt

Client Name:

Georgia Power

Project #:

Courier: Fed Ex UPS USPS Client
 Commercial Pace Other: _____

Custody Seal Present? Yes No Seals Intact? Yes No

Date/Initials Person Examining Contents: MT 9/10/21

Packing Material: Bubble Wrap Bubble Bags None Other

Biological Tissue Frozen?

Thermometer: IR Gun ID: 230 Type of Ice: Wet Blue None

Yes No N/A

Cooler Temp: 3.4 Correction Factor: Add/Subtract (°C) ± 0.1

Temp should be above freezing to 6°C

Samples out of temp criteria. Samples on ice, cooling process has begun

Cooler Temp Corrected (°C): 3.5

USDA Regulated Soil (N/A, water sample)

Did samples originate in a quarantine zone within the United States: CA, NY, or SC (check maps)?

Did samples originate from a foreign source (internationally, including Hawaii and Puerto Rico)? Yes No

	Comments/Discrepancy:
Chain of Custody Present? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	1.
Samples Arrived within Hold Time? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	2.
Short Hold Time Analysis (<72 hr.)? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	3.
Rush Turn Around Time Requested? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	4.
Sufficient Volume? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	5.
Correct Containers Used? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	6.
-Pace Containers Used? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Containers Intact? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	7.
Dissolved analysis: Samples Field Filtered? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	8.
Sample Labels Match COC? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	9.
-Includes Date/Time/ID/Analysis Matrix: <u>WT</u>	
Headspace in VOA Vials (>5-6mm)? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	10.
Trip Blank Present? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	11.
Trip Blank Custody Seals Present? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	

COMMENTS/SAMPLE DISCREPANCY

Field Data Required? Yes No

Lot ID of split containers:

CLIENT NOTIFICATION/RESOLUTION

Person contacted: _____ Date/Time: _____

Project Manager SCURF Review: _____ Date: _____

Project Manager SRF Review: _____ Date: _____

*Check mark top half of box if pH and/or dechlorination is verified and within the acceptance range for preservation samples.

Project #

Exceptions: VOA, Coliform, TOC, Oil and Grease, DRO/8015 (water) DOC, LLHg

**Bottom half of box is to list number of bottles

Item#	BP4U-125 mL Plastic Unpreserved (N/A) (Cl-)	BP3U-250 mL Plastic Unpreserved (N/A)	BP2U-500 mL Plastic Unpreserved (N/A)	BP1U-1 liter Plastic Unpreserved (N/A)	BP4S-125 mL Plastic H2SO4 (pH < 2) (Cl-)	BP3N-250 mL plastic HNO3 (pH < 2)	BP4Z-125 mL Plastic Zn Acetate & NaOH (>9)	BP4C-125 mL Plastic NaOH (pH > 12) (Cl-)	WGFU-Wide-mouthed Glass Jar Unpreserved	AG1U-1 liter Amber Unpreserved (N/A) (Cl-)	AG1H-1 liter Amber HCl (pH < 2)	AG3U-250 mL Amber Unpreserved (N/A) (Cl-)	AG1S-1 liter Amber H2SO4 (pH < 2)	AG3S-250 mL Amber H2SO4 (pH < 2)	AG3A(DG3A)-250 mL Amber NH4Cl (N/A)(Cl-)	DG9H-40 mL VOA HCl (N/A)	VG9T-40 mL VOA Na2S2O3 (N/A)	VG9U-40 mL VOA Unp (N/A)	DG9P-40 mL VOA H3PO4 (N/A)	VOAK (6 vials per kit)-S035 kit (N/A)	V/GK (3 vials per kit)-VPH/Gas kit (N/A)	SPST-125 mL Sterile Plastic (N/A - lab)	SPZT-250 mL Sterile Plastic (N/A - lab)	BP3A-250 mL Plastic (NH2)2SO4 (9.3-9.7)	AG0U-100 mL Amber Unpreserved vials (N/A)	VSGU-20 mL Scintillation vials (N/A)	DG9U-40 mL Amber Unpreserved vials (N/A)	
1	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
2	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
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12	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/

BPIN

N/C

pH Adjustment Log for Preserved Samples						
Sample ID	Type of Preservative	pH upon receipt	Date preservation adjusted	Time preservation adjusted	Amount of Preservative added	Lot #

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. Out of hold, incorrect preservative, out of temp, incorrect containers.



CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All retention fields must be completed accurately.

Section A Regulatory Client Information: Company: Georgia Power - Coal Combustion Residuals Address: 2460 Alabar Road Athens, GA 30639 Email: jbrubaker@gepower.com Phone: (404) 506-7239 Requested Date: 10 Day TAT	Section B Requested Project Information: Request To: JHU Alternatives Copy To: Golder Project Name: First McClellough Upgrade Vias Project #: 15045021 Purchase Order #: Invoice Information: Attention: sctevens@scsinn.com Company Name: Address: State / Location: Regulatory Agency: State / Location: GA
--	---

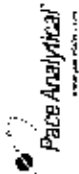
ITEM #	MATRIX CODE (See valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	DATE	TIME	SAMPLE TEMP AT COLLECTION	PRESERVATION						ANALYSIS TEST	Residual Chlorine (Y/N)	TEMP in C	Received or ice (Y/N)	Cooled Sealed Cooler (Y/N)	Samples intact (Y/N)	
						# OF CONTAINERS	Unpreserved - Ice	H2SO4	HNO3 - Ice	HCl	NaOH - Zn Ascorbic							Na2S2O3
3	DCIWA-SS	WT	8/30/21	12:29		5	3	3										
5	DCIWA-MIA	WT	8/30/21	14:56		5	2	3										
6																		
7																		
8																		
9																		
10																		
11																		
12																		
13																		
14																		

ADDITIONAL COMMENTS RETURNED BY / AFFILIATION: <i>Mr. Samper</i> DATE: <i>9/10/21</i> TIME: <i>14:40</i> ACCEPTED BY / AFFILIATION: <i>Charles Taylor</i> DATE: <i>9/10/21</i> TIME: <i>3:41 PM</i> INITIALS: <i>Y N Y</i>	DATE Signed: <i>9/10/21</i> Signature: <i>John W. Spensiek</i>
--	---

Quality Control Sample Performance Assessment

Analyst **Must Manually Enter All Fields Highlighted in Yellow.**

Test: Ra-226
Analyst: CLA
Date: 9/28/2021
Worksheet: 62851
Matrix: DW



Method Blank Assessment	MB Sample ID: 224-1077
	MB Concentration: -0.028
	M/R Counting Uncertainty: 0.217
	MB MDC: 0.589
MB Numerical Performance Indicator:	-0.25
MB Status vs Numerical Indicator:	N/A
MB Status vs MDC:	Pass

Laboratory Control Sample Assessment	LCS ID or #17		Y
	LCS62851	LCS062851	
Count Date:	10/7/2021	10/7/2021	
Spike I.D.:	19-033	19-033	
Decay Corrected Spike Concentration (pCi/mL)	24.033	24.033	
Volume Used (mL)	0.10	0.10	
Aliquot Volume (L, g, F)	0.508	0.508	
Target Conc. (pCi/L, g, F)	4.792	4.734	
Uncertainty (Calculated)	0.058	0.067	
Result (pCi/L, g, F)	4.037	4.418	
LCS01 CSO Counting Uncertainty (pCi/L, g, F)	0.623	0.646	
Numerical Performance Indicator	-2.37	-0.95	
Percent Recovery:	84.25%	93.33%	
Status vs Numerical Indicator:	N/A	N/A	
Status vs Recovery:	Pass	Pass	
Upper % Recovery Limits:	125%	125%	
Lower % Recovery Limits:	75%	75%	

Duplicate Sample Assessment	LCS ID or #17		Y
	LCS62851	LCS062851	
Sample I.D.:	92960766014	92960766014	
Duplicate Sample I.D.:	92560765014DUP	92560765014DUP	
Sample Result (pCi/L, g, F):	4.037	0.428	
Sample Result Counting Uncertainty (pCi/L, g, F):	0.623	0.225	
Sample Duplicate Result (pCi/L, g, F):	4.418	0.178	
Sample Duplicate Result Counting Uncertainty (pCi/L, g, F):	0.646	0.185	
Ave sample and/or duplicate results below RL?	NO	See Below	
Duplicate Numerical Performance Indicator:	-0.832	1.678 OK	
(Based on the LCS01 Percent Recovery) Duplicate RPD	10.22%	82.99%	
Duplicate Status vs Numerical Indicator:	N/A	N/A	
Duplicate Status vs RPD:	Pass	Fail**	
% RPD Limit:	25%	25%	

** Evaluation of duplicate precision & not applicable if either the sample or duplicate results are below the MDC.

Comments:

L-MSDS N/A

*** Right must be supported due to *****

10/27/21
DW

Sample Matrix Spike Control Assessment	MSMSD 1	MSMSD 2
<p>Sample Collection Date:</p> <p>Sample I.D.:</p> <p>Sample MS I.D.:</p> <p>Sample MS2 I.D.:</p> <p>Spike I.D.:</p> <p>MSMSD Decay Corrected Spike Concentration (pCi/mL):</p> <p>Spike Volume Used in MS (mL):</p> <p>Spike Volume Used in MSD (mL):</p> <p>MS Aliquot (L, g, F):</p> <p>MSD Aliquot (L, g, F):</p> <p>MSD Target Conc (pCi/L, g, F):</p> <p>MS Spike Uncertainty (Calculated):</p> <p>MSD Spike Uncertainty (Calculated):</p>	<p>Sample Result:</p> <p>Sample Matrix Spike Result:</p> <p>Matrix Spike Result Counting Uncertainty (pCi/L, g, F):</p> <p>Matrix Spike Duplicate Result:</p> <p>Matrix Spike Duplicate Result Counting Uncertainty (pCi/L, g, F):</p> <p>MS Numerical Performance Indicator:</p> <p>MSD Numerical Performance Indicator:</p> <p>MS Percent Recovery:</p> <p>MSD Percent Recovery:</p> <p>MS Status vs Numerical Indicator:</p> <p>MSD Status vs Numerical Indicator:</p> <p>MSMSD Upper % Recovery Limits:</p> <p>MSMSD Lower % Recovery Limits:</p>	

Matrix Spike/Matrix Spike Duplicate Sample Assessment
<p>Sample I.D.:</p> <p>Sample MS I.D.:</p> <p>Sample MS2 I.D.:</p> <p>Matrix Spike Result Counting Uncertainty (pCi/L, g, F):</p> <p>Matrix Spike Duplicate Result Counting Uncertainty (pCi/L, g, F):</p> <p>Duplicate Numerical Performance Indicator:</p> <p>(Based on the Percent Recovery) MS: MSD Duplicate RPD:</p> <p>MS: MSD Duplicate Status vs Numerical Indicator:</p> <p>MS: MSD Duplicate Status vs RPD:</p> <p>% RPD Limit:</p>

LAM 10/17/21

Quality Control Sample Performance Assessment

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Test: **Re-228**
 Analyst: **JC2**
 Date: **10/17/2021**
 Worksheet: **62848**
 Matrix: **WI**



Method Blank Assessment

MB Sample ID	2247069
MB concentration	0.208
MB 2 Sigma CSU	0.287
MB MDC	0.612
MB Numerical Performance Indicator	1.43
MB Status vs Numerical Indicator	Pass
MB Status vs MDC	Pass

Laboratory Control Sample Assessment

	LCS0 (Y or N/P)	Y
Count Data	10/4/2021	LCS062848
Decay Corrected Spike Concentration (pCi/mL)	21-029	21-029
Volume Used (mL)	37.973	37.973
Aliquot Volume (L, g, F)	0.10	0.10
Target Conc (pCi/L, g, F)	0.807	0.812
Uncertainty (Calculated)	4.703	4.876
Result (pCi/L, g, F)	0.236	0.229
LC50/CSU 2 Sigma CSU (pCi/L, g, F)	3.772	4.931
Numerical Performance Indicator	0.892	1.094
Percent Recovery	-1.98	0.45
Status vs Numerical Indicator	80.20%	105.45%
Status vs Recovery	Pass	Pass
Upper % Recovery Limit	135%	135%
Lower % Recovery Limit	60%	60%

Duplicate Sample Assessment

Sample ID	LCS02848	LCSD62848
Duplicate Sample ID	LCS062848	LCSD62848
Sample Result (pCi/L, g, F)	3.772	3.772
Sample Result 2 Sigma CSU (pCi/L, g, F)	0.892	0.892
Sample Duplicate Result (pCi/L, g, F)	4.931	4.931
Sample Duplicate Result 2 Sigma CSU (pCi/L, g, F)	1.094	1.094
Are sample and/or duplicate results below RL?	NO	NO
Duplicate Numerical Performance Indicator	-1.609	-1.609
Duplicate Numerical Performance Indicator (Based on the LCS/CSU Percent Recoveries)	27.20%	27.20%
Duplicate Status vs Numerical Indicator	Pass	Pass
Duplicate Status vs RPD	Pass	Pass
% RPD Limit	36%	36%

Evaluation of duplicate precision is not applicable if either the sample or duplicate results are below the MDC.

Comments:

Sample Matrix Spike Control Assessment

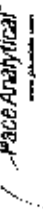
Sample Collection Date		MS/MSD 1	MS/MSD 2
Sample ID			
Sample MS ID			
Sample MSD ID			
Spike ID			
MS/MSD Decay Corrected Spike Concentration (pCi/mL)			
Spike Volume Used in MS (mL)			
Spike Volume Used in MSD (mL)			
MS Aliquot (L, g, F)			
MS Target Conc (pCi/L, g, F)			
MSD Aliquot (L, g, F)			
MSD Target Conc (pCi/L, g, F)			
MS Spike Uncertainty (calculated)			
MSD Spike Uncertainty (calculated)			
Sample Result 2 Sigma CSU (pCi/L, g, F)			
Sample Matrix Spike Result			
Matrix Spike Result 2 Sigma CSU (pCi/L, g, F)			
Sample Matrix Spike Duplicate Result			
Matrix Spike Duplicate Result 2 Sigma CSU (pCi/L, g, F)			
MS Numerical Performance Indicator			
MS Numerical Performance Indicator (Based on the Percent Recoveries)			
MS Percent Recovery			
MSD Percent Recovery			
MS Status vs Numerical Indicator			
MSD Status vs Numerical Indicator			
MS Status vs Recovery			
MSD Status vs Recovery			
MS/MSD Upper % Recovery Limit			
MS/MSD Lower % Recovery Limit			

Matrix Spike/Matrix Spike Duplicate Sample Assessment

Sample ID	
Sample MS ID	
Sample MSD ID	
Sample Matrix Spike Result	
Matrix Spike Result 2 Sigma CSU (pCi/L, g, F)	
Sample Matrix Spike Duplicate Result	
Sample Matrix Spike Duplicate Result 2 Sigma CSU (pCi/L, g, F)	
Duplicate Numerical Performance Indicator	
Duplicate Numerical Performance Indicator (Based on the Percent Recoveries)	
MS/MSD Duplicate RPD	
MS/MSD Duplicate Status vs Numerical Indicator	
MS/MSD Duplicate Status vs RPD	
% RPD Limit	

10/10/21
 JC2

Quality Control Sample Performance Assessment



Analyst Must Manually Enter All Fields Highlighted in Yellow.

Test: Ra-228
 Analysis: VAL
 Date: 10/11/2021
 Worksheet: 62850
 Matrix: WWT

Method Blank Assessment

MB Sample ID	2247073
MB Concentration	0.306
MB 2 Sigma CSU	0.283
MB MDC	0.572
MB Numerical Performance Indicator	2.12
MB Status vs Numerical Indicator	Warning
MB Status vs MDC	Pass

Laboratory Control Sample Assessment

Count Data Spike I.D.	Y
10/4/2021	LCS062850
21-029	37.973
0.10	0.10
0.805	0.816
4.716	4.653
0.231	0.228
5.361	4.280
1.173	0.992
1.06	-0.72
113.68%	91.98%
N/A	N/A
Pass	Pass
135%	135%
60%	60%

Duplicate Sample Assessment

Sample I.D.	Duplicate Sample I.D.	Sample Result (pCtL, g, F)	Duplicate Result (pCtL, g, F)	Sample Duplicate Result (pCtL, g, F)	Sample Duplicate Result 2 Sigma CSU (pCtL, g, F)	Are sample and/or duplicate results below RL?	Duplicate Numerical Performance Indicator	Duplicate Status vs Numerical Indicator
LCS02850	LCS062850	5.361	1.173	4.280	0.992	NO	1.380	21.11%
Pass	Pass	35%						

Sample Matrix Spike Control Assessment

Sample Collection Date	Sample I.D.	MS/MSD 1	MS/MSD 2
Sample MS I.D.	Sample MSD I.D.		
MS/MSD Decay Corrected Spike Concentration (pCt/mL)	Spike I.D.		
Spike Volume Used in MS (mL)	Spike Volume Used in MSD (mL)		
MS Aqueur (L, Q, F)	MS Aqueur (L, Q, F)		
MS Target Conc. (pCtL, g, F)	MSD Aqueur (L, Q, F)		
MSD Target Conc. (pCtL, g, F)	MS Spike Uncertainty (calculated)		
MSD Spike Uncertainty (calculated)	MSD Spike Uncertainty (calculated)		
Sample Result 2 Sigma CSU (pCtL, g, F)	Sample Result		
Matrix Spike Result 2 Sigma CSU (pCtL, g, F)	Sample Mean Spike Result		
Sample Matrix Spike Duplicate Result	Matrix Spike Result 2 Sigma CSU (pCtL, g, F)		
Matrix Spike Duplicate Result 2 Sigma CSU (pCtL, g, F)	MS Numerical Performance Indicator		
MS Numerical Performance Indicator	MS Percent Recovery		
MSD Percent Recovery	MSD Status vs Numerical Indicator		
MS Status vs Numerical Indicator	MS Status vs Recovery		
MSD Status vs Recovery	MS/MSD Upper % Recovery Limit		
MS/MSD Lower % Recovery Limit	MS/MSD Lower % Recovery Limit		

Matrix Spike/Matrix Duplicate Sample Assessment

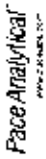
Sample I.D.	Sample MS I.D.	Sample MSD I.D.	Matrix Spike Result 2 Sigma CSU (pCtL, g, F)	Matrix Spike Duplicate Result	Duplicate Numerical Performance Indicator	Duplicate Status vs Numerical Indicator	MS/MSD Duplicate Status vs RPD	MS/MSD Duplicate Status vs RPD	% RPD Limit
Sample MS I.D.	Sample MSD I.D.	Sample Matrix Spike Result	Sample Matrix Spike Duplicate Result	Duplicate Numerical Performance Indicator	(Based on the Percent Recoveries) MS/MSD Duplicate RPD	MS/MSD Duplicate Status vs Numerical Indicator	MS/MSD Duplicate Status vs RPD	% RPD Limit	

* Evaluation of duplicate precision is not applicable if either the sample or duplicate results are below the MDC.

Comments:

*RELATIO
 CMA*

Quality Control Sample Performance Assessment



Analyst Must Manually Enter All Fields Highlighted in Yellow

Test: Ra-226
Analyst: SLC
Date: 9/28/2021
Worksheet: 62849
Matrix: DW

Method Blank Assessment	MS/MSD 1	MS/MSD 2
MB Sample ID: 224-072		
MB Concentration: 0.007		
MB Counting Uncertainty: 0.168		
MB MDC: 0.443		
MB Numerical Performance Indicator: 0.08		
MB Status vs Numerical Indicator: N/A		
MB Status vs MDC: Pass		

Laboratory Control Sample Assessment	MS/MSD 1	MS/MSD 2
Count Date: 10/6/2021		
Spike ID: 19-033		
Decay Corrected Spike Concentration (pCi/mL): 24.033		
Volume Used (mL): 0.10		
Aliquot Volume (L, g, F): 0.503		
Target Conc (pCi/L, g, F): 4.779		
Uncertainty (Calculated): 0.057		
Result (pCi/L, g, F): 5.249		
LCS/LCSD Counting Uncertainty (pCi/L, g, F): 0.691		
Numerical Performance Indicator: 1.33		
Percent Recovery: 109.83%		
Status vs Numerical Indicator: N/A		
Status vs Recovery: Pass		
Upper % Recovery Limits: 125%		
Lower % Recovery Limits: 75%		

Duplicate Sample Assessment	MS/MSD 1	MS/MSD 2
Sample ID: LCS062849		
Duplicate Sample ID: LCS062849		
Sample Result (pCi/L, g, F): 5.249		
Sample Duplicate Result (pCi/L, g, F): 5.216		
Sample Duplicate Result Counting Uncertainty (pCi/L, g, F): 0.720		
Are sample and/or duplicate results below RL? NO		
Duplicate Numerical Performance Indicator: 0.680		
(Based on the LCS/LCSD Percent Recoveries) Duplicate IIR: 0.82%		
Duplicate Status vs Numerical Indicator: N/A		
Duplicate Status vs RPD: Pass		
% RPD Limit: 25%		

Sample Matrix Spike Control Assessment	MS/MSD 1	MS/MSD 2
Sample Collection Date: Sample ID: Sample MS ID: Sample MSD ID: Spike I.D.:		
MS/MSD Decay Carried Spike Concentration (pCi/mL): Spike Volume Used in MS (mL): Spike Volume Used in MSD (mL): MS Aliquot (L, g, F): MS Target Conc (pCi/L, g, F): MSD Aliquot (L, g, F): MS Spike Uncertainty (Calculated): MS Spike Uncertainty (Calculated): MSD Spike Uncertainty (Calculated):		
Sample Result Counting Uncertainty (pCi/L, g, F): Sample Matrix Spike Result: Matrix Spike Result Counting Uncertainty (pCi/L, g, F): Matrix Spike Duplicate Result Counting Uncertainty (pCi/L, g, F): MS Numerical Performance Indicator: MSD Numerical Performance Indicator: MS Percent Recovery: MSD Percent Recovery: MS Status vs Numerical Indicator: MSD Status vs Numerical Indicator: MS Status vs Recovery: MSD Status vs Recovery: MS/MSD Upper % Recovery Limit: MS/MSD Lower % Recovery Limit:		

Matrix Spike/Matrix Spike Duplicate Sample Assessment	MS/MSD 1	MS/MSD 2
Sample ID: Sample MS ID: Sample MSD ID: Matrix Spike Result Counting Uncertainty (pCi/L, g, F): Sample Matrix Spike Duplicate Result: Sample Matrix Spike Duplicate Result Counting Uncertainty (pCi/L, g, F): Duplicate Numerical Performance Indicator: Duplicate Numerical Performance Indicator (Based on the Percent Recoveries): MS/MSD Duplicate RPD: MS/MSD Duplicate Status vs Numerical Indicator: MS/MSD Duplicate Status vs RPD: % RPD Limit:		

*** Evaluation of duplicate precision is not applicable if either the sample or duplicate results are below the MDC

Comments:

... Results are acceptable due to acceptable precision N/A

17/10/2021 10:01 AM

September 28, 2021

Joju Abraham
Georgia Power-CCR
2480 Maner Road
Atlanta, GA 30339

RE: Project: MCDONOUGH
Pace Project No.: 92561195

Dear Joju Abraham:

Enclosed are the analytical results for sample(s) received by the laboratory between September 10, 2021 and September 14, 2021. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

- Pace Analytical Services - Asheville
- Pace Analytical Services - Charlotte
- Pace Analytical Services - Peachtree Corners, GA

If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Nicole D'Oleo
nicole.d'oleo@pacelabs.com
(704)875-9092
Project Manager

Enclosures

cc: Stephen Benda
Daniela Herrera, Golder
Ben Hodges, Georgia Power
Kristen Jurinko
J. Shelby Mobley
Charles Norton, Southern Company
Ms. Lauren Petty, Southern Company
Dawn Prell, Golder Associates Inc.
Tim Richards, Golder Associates - Atlanta



REPORT OF LABORATORY ANALYSIS

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CERTIFICATIONS

Project: MCDONOUGH

Pace Project No.: 92561195

Pace Analytical Services Charlotte

9800 Kinsey Ave. Ste 100, Huntersville, NC 28078
Louisiana/NELAP Certification # LA170028
North Carolina Drinking Water Certification #: 37706
North Carolina Field Services Certification #: 5342
North Carolina Wastewater Certification #: 12

South Carolina Certification #: 99006001
Florida/NELAP Certification #: E87627
Kentucky UST Certification #: 84
Virginia/VELAP Certification #: 460221

Pace Analytical Services Asheville

2225 Riverside Drive, Asheville, NC 28804
Florida/NELAP Certification #: E87648
North Carolina Drinking Water Certification #: 37712

North Carolina Wastewater Certification #: 40
South Carolina Certification #: 99030001
Virginia/VELAP Certification #: 460222

Pace Analytical Services Peachtree Corners

110 Technology Pkwy, Peachtree Corners, GA 30092
Florida DOH Certification #: E87315
Georgia DW Inorganics Certification #: 812

North Carolina Certification #: 381
South Carolina Certification #: 98011001

REPORT OF LABORATORY ANALYSIS

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SAMPLE SUMMARY

Project: MCDONOUGH

Pace Project No.: 92561195

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92561195001	B-100	Water	09/13/21 16:55	09/14/21 09:35
92560768001	B-62	Water	09/09/21 15:45	09/10/21 17:40

REPORT OF LABORATORY ANALYSIS

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SAMPLE ANALYTE COUNT

Project: MCDONOUGH

Pace Project No.: 92561195

Lab ID	Sample ID	Method	Analysts	Analytes Reported
92561195001	B-100	EPA 6010D	KH	1
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2011	ALW	1
		EPA 300.0 Rev 2.1 1993	CDC	3
92560768001	B-62	EPA 6010D	DRB	1
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2011	ALW	1
		EPA 300.0 Rev 2.1 1993	CDC	3

PASI-A = Pace Analytical Services - Asheville

PASI-C = Pace Analytical Services - Charlotte

PASI-GA = Pace Analytical Services - Peachtree Corners, GA

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: MCDONOUGH
Pace Project No.: 92561195

Sample: B-100		Lab ID: 92561195001		Collected: 09/13/21 16:55		Received: 09/14/21 09:35		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data									
Analytical Method: Pace Analytical Services - Charlotte									
Performed by	CUSTOMER				1		09/14/21 16:42		
pH	5.27	Std. Units			1		09/14/21 16:42		
6010D ATL ICP									
Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA									
Calcium	51.5	mg/L	1.0	0.12	1	09/23/21 10:02	09/23/21 19:51	7440-70-2	
6020 MET ICPMS									
Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA									
Antimony	ND	mg/L	0.0030	0.00078	1	09/21/21 12:35	09/22/21 19:34	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0011	1	09/21/21 12:35	09/22/21 19:34	7440-38-2	
Barium	0.021	mg/L	0.0050	0.00067	1	09/21/21 12:35	09/22/21 19:34	7440-39-3	
Beryllium	0.00053	mg/L	0.00050	0.000054	1	09/21/21 12:35	09/22/21 19:34	7440-41-7	
Boron	0.24	mg/L	0.040	0.0086	1	09/21/21 12:35	09/22/21 19:34	7440-42-8	
Cadmium	0.00029J	mg/L	0.00050	0.00011	1	09/21/21 12:35	09/22/21 19:34	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	09/21/21 12:35	09/22/21 19:34	7440-47-3	
Cobalt	0.035	mg/L	0.0050	0.00039	1	09/21/21 12:35	09/22/21 19:34	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	09/21/21 12:35	09/22/21 19:34	7439-92-1	
Lithium	0.0022J	mg/L	0.030	0.00073	1	09/21/21 12:35	09/22/21 19:34	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	09/21/21 12:35	09/22/21 19:34	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	09/21/21 12:35	09/22/21 19:34	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	09/21/21 12:35	09/22/21 19:34	7440-28-0	
7470 Mercury									
Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA									
Mercury	ND	mg/L	0.00020	0.000078	1	09/24/21 09:45	09/27/21 17:42	7439-97-6	
2540C Total Dissolved Solids									
Analytical Method: SM 2540C-2011 Pace Analytical Services - Peachtree Corners, GA									
Total Dissolved Solids	636	mg/L	20.0	20.0	1		09/20/21 16:36		
300.0 IC Anions 28 Days									
Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville									
Chloride	11.1	mg/L	1.0	0.60	1		09/15/21 21:55	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		09/15/21 21:55	16984-48-8	
Sulfate	351	mg/L	8.0	4.0	8		09/16/21 03:25	14808-79-8	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: MCDONOUGH
Pace Project No.: 92561195

Sample: B-62		Lab ID: 92560768001		Collected: 09/09/21 15:45		Received: 09/10/21 17:40		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data									
Analytical Method: Pace Analytical Services - Charlotte									
Performed by	CUSTOMER				1		09/13/21 08:41		
pH	6.31	Std. Units			1		09/13/21 08:41		
6010D ATL ICP									
Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA									
Calcium	29.2	mg/L	1.0	0.12	1	09/20/21 09:45	09/20/21 17:33	7440-70-2	
6020 MET ICPMS									
Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA									
Antimony	ND	mg/L	0.0030	0.00078	1	09/20/21 09:45	09/22/21 11:15	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0011	1	09/20/21 09:45	09/22/21 11:15	7440-38-2	
Barium	0.021	mg/L	0.0050	0.00067	1	09/20/21 09:45	09/22/21 11:15	7440-39-3	
Beryllium	0.00014J	mg/L	0.00050	0.000054	1	09/20/21 09:45	09/22/21 11:15	7440-41-7	
Boron	0.068	mg/L	0.040	0.0086	1	09/20/21 09:45	09/22/21 11:15	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	09/20/21 09:45	09/22/21 11:15	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	09/20/21 09:45	09/22/21 11:15	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00039	1	09/20/21 09:45	09/22/21 11:15	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	09/20/21 09:45	09/22/21 11:15	7439-92-1	
Lithium	0.0094J	mg/L	0.030	0.00073	1	09/20/21 09:45	09/22/21 11:15	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	09/20/21 09:45	09/22/21 11:15	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	09/20/21 09:45	09/22/21 11:15	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	09/20/21 09:45	09/22/21 11:15	7440-28-0	
7470 Mercury									
Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA									
Mercury	ND	mg/L	0.00020	0.000078	1	09/21/21 07:00	09/21/21 12:20	7439-97-6	
2540C Total Dissolved Solids									
Analytical Method: SM 2540C-2011 Pace Analytical Services - Peachtree Corners, GA									
Total Dissolved Solids	174	mg/L	10.0	10.0	1		09/15/21 18:58		
300.0 IC Anions 28 Days									
Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville									
Chloride	5.8	mg/L	1.0	0.60	1		09/15/21 06:38	16887-00-6	
Fluoride	0.14	mg/L	0.10	0.050	1		09/15/21 06:38	16984-48-8	
Sulfate	49.2	mg/L	1.0	0.50	1		09/15/21 06:38	14808-79-8	

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: MCDONOUGH

Pace Project No.: 92561195

QC Batch: 648325

Analysis Method: EPA 6010D

QC Batch Method: EPA 3010A

Analysis Description: 6010D ATL

Laboratory: Pace Analytical Services - Peachtree Corners, GA

Associated Lab Samples: 92560768001

METHOD BLANK: 3400203

Matrix: Water

Associated Lab Samples: 92560768001

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Calcium	mg/L	ND	1.0	0.12	09/20/21 17:23	

LABORATORY CONTROL SAMPLE: 3400204

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Calcium	mg/L	1	1.0	103	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3400205 3400206

Parameter	Units	3400205		3400206		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		92560774001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result						
Calcium	mg/L	42.0	1	1	44.1	42.4	202	31	75-125	4	20 M1

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: MCDONOUGH
Pace Project No.: 92561195

QC Batch: 648974	Analysis Method: EPA 6010D
QC Batch Method: EPA 3010A	Analysis Description: 6010D ATL
	Laboratory: Pace Analytical Services - Peachtree Corners, GA

Associated Lab Samples: 92561195001

METHOD BLANK: 3403796 Matrix: Water

Associated Lab Samples: 92561195001

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Calcium	mg/L	ND	1.0	0.12	09/23/21 17:54	

LABORATORY CONTROL SAMPLE: 3403797

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Calcium	mg/L	1	1.0	102	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3403798 3403799

Parameter	Units	92560768003		3403799		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result						
Calcium	mg/L	42.1	1	41.6	40.7	-42	-139	75-125	2	20	M1

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QUALITY CONTROL DATA

Project: MCDONOUGH
Pace Project No.: 92561195

QC Batch: 648326 Analysis Method: EPA 6020B
QC Batch Method: EPA 3005A Analysis Description: 6020 MET
Laboratory: Pace Analytical Services - Peachtree Corners, GA

Associated Lab Samples: 92560768001

METHOD BLANK: 3400210 Matrix: Water
Associated Lab Samples: 92560768001

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	mg/L	ND	0.0030	0.00078	09/22/21 11:04	
Arsenic	mg/L	ND	0.0050	0.0011	09/22/21 11:04	
Barium	mg/L	ND	0.0050	0.00067	09/22/21 11:04	
Beryllium	mg/L	ND	0.00050	0.000054	09/22/21 11:04	
Boron	mg/L	ND	0.040	0.0086	09/22/21 11:04	
Cadmium	mg/L	ND	0.00050	0.00011	09/22/21 11:04	
Chromium	mg/L	ND	0.0050	0.0011	09/22/21 11:04	
Cobalt	mg/L	ND	0.0050	0.00039	09/22/21 11:04	
Lead	mg/L	ND	0.0010	0.00089	09/22/21 11:04	
Lithium	mg/L	ND	0.030	0.00073	09/22/21 11:04	
Molybdenum	mg/L	ND	0.010	0.00074	09/22/21 11:04	
Selenium	mg/L	ND	0.0050	0.0014	09/22/21 11:04	
Thallium	mg/L	ND	0.0010	0.00018	09/22/21 11:04	

LABORATORY CONTROL SAMPLE: 3400211

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	mg/L	0.1	0.11	105	80-120	
Arsenic	mg/L	0.1	0.10	101	80-120	
Barium	mg/L	0.1	0.11	106	80-120	
Beryllium	mg/L	0.1	0.11	106	80-120	
Boron	mg/L	1	1.1	113	80-120	
Cadmium	mg/L	0.1	0.10	101	80-120	
Chromium	mg/L	0.1	0.10	103	80-120	
Cobalt	mg/L	0.1	0.099	99	80-120	
Lead	mg/L	0.1	0.10	102	80-120	
Lithium	mg/L	0.1	0.11	108	80-120	
Molybdenum	mg/L	0.1	0.10	101	80-120	
Selenium	mg/L	0.1	0.10	101	80-120	
Thallium	mg/L	0.1	0.10	100	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3400212 3400213

Parameter	Units	92560774001 Result	MS		MSD		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
			MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result						
Antimony	mg/L	ND	0.1	0.1	0.10	0.10	105	105	75-125	0	20	
Arsenic	mg/L	ND	0.1	0.1	0.10	0.10	102	105	75-125	3	20	

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QUALITY CONTROL DATA

Project: MCDONOUGH

Pace Project No.: 92561195

Parameter	Units	3400212		3400213		MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		92560774001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result								
Barium	mg/L	0.022	0.1	0.1	0.13	0.13	104	103	75-125	1	20		
Beryllium	mg/L	ND	0.1	0.1	0.099	0.10	99	101	75-125	2	20		
Boron	mg/L	0.51	1	1	1.6	1.6	110	109	75-125	1	20		
Cadmium	mg/L	ND	0.1	0.1	0.10	0.10	100	101	75-125	1	20		
Chromium	mg/L	ND	0.1	0.1	0.10	0.10	100	102	75-125	2	20		
Cobalt	mg/L	0.0048J	0.1	0.1	0.11	0.11	101	102	75-125	0	20		
Lead	mg/L	ND	0.1	0.1	0.10	0.10	101	101	75-125	1	20		
Lithium	mg/L	0.024J	0.1	0.1	0.12	0.12	99	99	75-125	0	20		
Molybdenum	mg/L	0.0023J	0.1	0.1	0.11	0.11	105	106	75-125	1	20		
Selenium	mg/L	0.0031J	0.1	0.1	0.11	0.11	104	106	75-125	2	20		
Thallium	mg/L	ND	0.1	0.1	0.098	0.10	98	101	75-125	3	20		

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QUALITY CONTROL DATA

Project: MCDONOUGH
Pace Project No.: 92561195

QC Batch: 648523 Analysis Method: EPA 6020B
QC Batch Method: EPA 3005A Analysis Description: 6020 MET
Laboratory: Pace Analytical Services - Peachtree Corners, GA

Associated Lab Samples: 92561195001

METHOD BLANK: 3401252 Matrix: Water
Associated Lab Samples: 92561195001

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	mg/L	ND	0.0030	0.00078	09/22/21 18:13	
Arsenic	mg/L	ND	0.0050	0.0011	09/22/21 18:13	
Barium	mg/L	ND	0.0050	0.00067	09/22/21 18:13	
Beryllium	mg/L	ND	0.00050	0.000054	09/22/21 18:13	
Boron	mg/L	ND	0.040	0.0086	09/22/21 18:13	
Cadmium	mg/L	ND	0.00050	0.00011	09/22/21 18:13	
Chromium	mg/L	ND	0.0050	0.0011	09/22/21 18:13	
Cobalt	mg/L	ND	0.0050	0.00039	09/22/21 18:13	
Lead	mg/L	ND	0.0010	0.00089	09/22/21 18:13	
Lithium	mg/L	ND	0.030	0.00073	09/22/21 18:13	
Molybdenum	mg/L	ND	0.010	0.00074	09/22/21 18:13	
Selenium	mg/L	ND	0.0050	0.0014	09/22/21 18:13	
Thallium	mg/L	ND	0.0010	0.00018	09/22/21 18:13	

LABORATORY CONTROL SAMPLE: 3401253

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	mg/L	0.1	0.11	109	80-120	
Arsenic	mg/L	0.1	0.10	101	80-120	
Barium	mg/L	0.1	0.11	109	80-120	
Beryllium	mg/L	0.1	0.095	95	80-120	
Boron	mg/L	1	1.0	100	80-120	
Cadmium	mg/L	0.1	0.10	101	80-120	
Chromium	mg/L	0.1	0.11	109	80-120	
Cobalt	mg/L	0.1	0.11	108	80-120	
Lead	mg/L	0.1	0.10	100	80-120	
Lithium	mg/L	0.1	0.095	95	80-120	
Molybdenum	mg/L	0.1	0.10	104	80-120	
Selenium	mg/L	0.1	0.098	98	80-120	
Thallium	mg/L	0.1	0.10	100	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3401254 3401255

Parameter	Units	92560774020 Result	MS		MSD		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
			Spike Conc.	MSD Spike Conc.	MS Result	MSD Result						
Antimony	mg/L	ND	0.1	0.1	0.11	0.11	108	107	75-125	1	20	
Arsenic	mg/L	0.0016J	0.1	0.1	0.10	0.10	100	100	75-125	0	20	

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QUALITY CONTROL DATA

Project: MCDONOUGH

Pace Project No.: 92561195

Parameter	Units	3401254		3401255		MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		92560774020 Result	MS Spike Conc.	MSD Spike Conc.	MS Result								
Barium	mg/L	0.021	0.1	0.1	0.13	0.13	113	113	75-125	0	20		
Beryllium	mg/L	0.0090	0.1	0.1	0.10	0.10	92	94	75-125	2	20		
Boron	mg/L	0.16	1	1	1.2	1.2	99	102	75-125	3	20		
Cadmium	mg/L	0.0014	0.1	0.1	0.10	0.10	101	100	75-125	0	20		
Chromium	mg/L	ND	0.1	0.1	0.11	0.11	109	109	75-125	0	20		
Cobalt	mg/L	0.23	0.1	0.1	0.34	0.32	107	94	75-125	4	20		
Lead	mg/L	ND	0.1	0.1	0.099	0.097	99	97	75-125	2	20		
Lithium	mg/L	0.053	0.1	0.1	0.15	0.14	95	90	75-125	4	20		
Molybdenum	mg/L	ND	0.1	0.1	0.10	0.11	103	105	75-125	2	20		
Selenium	mg/L	0.0035J	0.1	0.1	0.10	0.10	100	97	75-125	2	20		
Thallium	mg/L	0.00036J	0.1	0.1	0.097	0.097	97	96	75-125	1	20		

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QUALITY CONTROL DATA

Project: MCDONOUGH

Pace Project No.: 92561195

QC Batch: 648337

Analysis Method: EPA 7470A

QC Batch Method: EPA 7470A

Analysis Description: 7470 Mercury

Laboratory: Pace Analytical Services - Peachtree Corners, GA

Associated Lab Samples: 92560768001

METHOD BLANK: 3400307

Matrix: Water

Associated Lab Samples: 92560768001

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	mg/L	ND	0.00020	0.000078	09/21/21 12:04	

LABORATORY CONTROL SAMPLE: 3400308

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	mg/L	0.0025	0.0025	98	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3400309 3400310

Parameter	Units	3400309		3400310		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result						
Mercury	mg/L	92561283001 ND	0.0025	0.0025	0.0026	0.0024	103	96	75-125	7	20

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QUALITY CONTROL DATA

Project: MCDONOUGH
Pace Project No.: 92561195

QC Batch: 649459 Analysis Method: EPA 7470A
QC Batch Method: EPA 7470A Analysis Description: 7470 Mercury
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92561195001

METHOD BLANK: 3406298 Matrix: Water
Associated Lab Samples: 92561195001

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	mg/L	ND	0.00020	0.000078	09/27/21 16:51	

LABORATORY CONTROL SAMPLE: 3406299

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	mg/L	0.0025	0.0027	107	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3406300 3406301

Parameter	Units	92560774017		3406301		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result						
Mercury	mg/L	ND	0.0025	0.0025	0.0026	100	103	75-125	3	20	

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QUALITY CONTROL DATA

Project: MCDONOUGH

Pace Project No.: 92561195

QC Batch: 647027

Analysis Method: SM 2540C-2011

QC Batch Method: SM 2540C-2011

Analysis Description: 2540C Total Dissolved Solids

Laboratory: Pace Analytical Services - Peachtree Corners, GA

Associated Lab Samples: 92560768001

METHOD BLANK: 3393790

Matrix: Water

Associated Lab Samples: 92560768001

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	ND	10.0	10.0	09/15/21 18:56	

LABORATORY CONTROL SAMPLE: 3393791

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	400	390	98	90-111	

SAMPLE DUPLICATE: 3393792

Parameter	Units	92560138001 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	75.0	78.0	4	10	

SAMPLE DUPLICATE: 3393793

Parameter	Units	92560281005 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	133	139	4	10	

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QUALITY CONTROL DATA

Project: MCDONOUGH

Pace Project No.: 92561195

QC Batch: 648323

Analysis Method: SM 2540C-2011

QC Batch Method: SM 2540C-2011

Analysis Description: 2540C Total Dissolved Solids

Laboratory: Pace Analytical Services - Peachtree Corners, GA

Associated Lab Samples: 92561195001

METHOD BLANK: 3400167

Matrix: Water

Associated Lab Samples: 92561195001

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	ND	10.0	10.0	09/20/21 16:33	

LABORATORY CONTROL SAMPLE: 3400168

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	400	384	96	90-111	

SAMPLE DUPLICATE: 3400169

Parameter	Units	92560963001 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	139	127	9	10	

SAMPLE DUPLICATE: 3400170

Parameter	Units	92560768008 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	296	295	0	10	

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QUALITY CONTROL DATA

Project: MCDONOUGH
Pace Project No.: 92561195

QC Batch: 647162 Analysis Method: EPA 300.0 Rev 2.1 1993
QC Batch Method: EPA 300.0 Rev 2.1 1993 Analysis Description: 300.0 IC Anions
Laboratory: Pace Analytical Services - Asheville

Associated Lab Samples: 92560768001

METHOD BLANK: 3394748 Matrix: Water
Associated Lab Samples: 92560768001

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	0.60	09/14/21 22:53	
Fluoride	mg/L	ND	0.10	0.050	09/14/21 22:53	
Sulfate	mg/L	ND	1.0	0.50	09/14/21 22:53	

LABORATORY CONTROL SAMPLE: 3394749

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	50	50.4	101	90-110	
Fluoride	mg/L	2.5	2.4	97	90-110	
Sulfate	mg/L	50	50.9	102	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3394750 3394751

Parameter	Units	92560938001		MSD		MS		MSD		% Rec Limits	RPD	Max RPD	Qual
		Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec					
Chloride	mg/L	3.0	50	50	58.4	61.9	111	118	90-110	6	10	M1	
Fluoride	mg/L	0.091J	2.5	2.5	3.4	3.5	131	134	90-110	2	10	M1	
Sulfate	mg/L	33.4	50	50	88.5	91.8	110	117	90-110	4	10	M1	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3394752 3394753

Parameter	Units	92560676003		MSD		MS		MSD		% Rec Limits	RPD	Max RPD	Qual
		Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec					
Chloride	mg/L	146	50	50	196	198	99	105	90-110	1	10		
Fluoride	mg/L	0.29	2.5	2.5	4.9	4.8	184	179	90-110	2	10	M1	
Sulfate	mg/L	140	50	50	193	195	105	109	90-110	1	10		

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3394754 3394755

Parameter	Units	92560676001		MSD		MS		MSD		% Rec Limits	RPD	Max RPD	Qual
		Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec					
Chloride	mg/L	4.9	50	50	62.8	64.2	116	119	90-110	2	10	M1	
Fluoride	mg/L	0.40	2.5	2.5	3.5	3.6	124	127	90-110	2	10	M1	
Sulfate	mg/L	3.8	50	50	62.4	63.7	117	120	90-110	2	10	M1	

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QUALITY CONTROL DATA

Project: MCDONOUGH
Pace Project No.: 92561195

QC Batch: 647237 Analysis Method: EPA 300.0 Rev 2.1 1993
QC Batch Method: EPA 300.0 Rev 2.1 1993 Analysis Description: 300.0 IC Anions
Laboratory: Pace Analytical Services - Asheville

Associated Lab Samples: 92561195001

METHOD BLANK: 3394951 Matrix: Water
Associated Lab Samples: 92561195001

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	0.60	09/15/21 13:41	
Fluoride	mg/L	ND	0.10	0.050	09/15/21 13:41	
Sulfate	mg/L	ND	1.0	0.50	09/15/21 13:41	

LABORATORY CONTROL SAMPLE: 3394952

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	50	46.9	94	90-110	
Fluoride	mg/L	2.5	2.4	96	90-110	
Sulfate	mg/L	50	48.7	97	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3394953 3394954

Parameter	Units	MS		MSD		MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		92560774021	Result	Spike Conc.	Spike Conc.								
Chloride	mg/L	10.9	50	50	62.5	63.0	103	104	90-110	1	10		
Fluoride	mg/L	0.47	2.5	2.5	3.3	3.3	112	112	90-110	0	10	M1	
Sulfate	mg/L	272	50	50	315	313	87	82	90-110	1	10	M1	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3394955 3394956

Parameter	Units	MS		MSD		MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		92560768007	Result	Spike Conc.	Spike Conc.								
Chloride	mg/L	8.7	50	50	59.6	60.9	102	104	90-110	2	10		
Fluoride	mg/L	0.051J	2.5	2.5	2.6	2.7	103	105	90-110	2	10		
Sulfate	mg/L	174	50	50	217	219	88	91	90-110	1	10	M1	

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QUALIFIERS

Project: MCDONOUGH

Pace Project No.: 92561195

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

Acid preservation may not be appropriate for 2 Chloroethylvinyl ether.

A separate vial preserved to a pH of 4-5 is recommended in SW846 Chapter 4 for the analysis of Acrolein and Acrylonitrile by EPA Method 8260.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Reported results are not rounded until the final step prior to reporting. Therefore, calculated parameters that are typically reported as "Total" may vary slightly from the sum of the reported component parameters.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

ANALYTE QUALIFIERS

M1 Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: MCDONOUGH

Pace Project No.: 92561195

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92560768001	B-62				
92561195001	B-100				
92560768001	B-62	EPA 3010A	648325	EPA 6010D	648333
92561195001	B-100	EPA 3010A	648974	EPA 6010D	649029
92560768001	B-62	EPA 3005A	648326	EPA 6020B	648331
92561195001	B-100	EPA 3005A	648523	EPA 6020B	648596
92560768001	B-62	EPA 7470A	648337	EPA 7470A	648433
92561195001	B-100	EPA 7470A	649459	EPA 7470A	649538
92560768001	B-62	SM 2540C-2011	647027		
92561195001	B-100	SM 2540C-2011	648323		
92560768001	B-62	EPA 300.0 Rev 2.1 1993	647162		
92561195001	B-100	EPA 300.0 Rev 2.1 1993	647237		

REPORT OF LABORATORY ANALYSIS

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Laboratory receiving samples:

Asheville Eden Greenwood Huntersville Raleigh Mechanicsville Atlanta Kernersville

Sample Condition Upon Receipt

Client Name:

Georgia Power

Project #

WO# : 92561195



Courier: Fed Ex UPS USPS Client
 Commercial Pace Other: _____

Custody Seal Present? Yes No Seals Intact? Yes No

Date/Initials Person Examining Contents: MT 9/18/21

Packing Material: Bubble Wrap Bubble Bags None Other

Biological Tissue Frozen? Yes No N/A

Thermometer: IR Gun ID: 230 Type of Ice: Wet Blue None

Cooler Temp: 3.4 Correction Factor: Add/Subtract (°C) ± 0.1

Temp should be above freezing to 6°C
 Samples out of temp criteria. Samples on ice, cooling process has begun

Cooler Temp Corrected (°C): 3.5

USDA Regulated Soil (N/A, water sample)

Did samples originate in a quarantine zone within the United States: CA, NY, or SC (check maps)?
 Yes No

Did samples originate from a foreign source (internationally, including Hawaii and Puerto Rico)? Yes No

	Comments/Discrepancy:
Chain of Custody Present? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	1.
Samples Arrived within Hold Time? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	2.
Short Hold Time Analysis (<72 hr.)? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	3.
Rush Turn Around Time Requested? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	4.
Sufficient Volume? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	5.
Correct Containers Used? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	6.
-Pace Containers Used? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Containers Intact? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	7.
Dissolved analysis: Samples Field Filtered? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	8.
Sample Labels Match COC? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	9.
-Includes Date/Time/ID/Analysis Matrix: <u>WT</u>	
Headspace in VOA Vials (>5-6mm)? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	10.
Trip Blank Present? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	11.
Trip Blank Custody Seals Present? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	

Field Data Required? Yes No

COMMENTS/SAMPLE DISCREPANCY

Lot ID of split containers:

CLIENT NOTIFICATION/RESOLUTION

Person contacted: _____ Date/Time: _____

Project Manager SCURF Review: _____

Date: _____

Project Manager SRF Review: _____

Date: _____



Document Name:
Sample Condition Upon Receipt(SCUR)
Document No.:
F-CAR-CS-033-Rev.07

Document Revised: October 28, 2020
Page 1 of 2
Issuing Authority:
Pace Carolinas Quality Office

Laboratory receiving samples:

Asheville Eden Greenwood Huntersville Raleigh Mechanicsville Atlanta Kernersville

Sample Condition Upon Receipt

Client Name:

Project #:

WO#: 92561195

PM: NMG

Due Date: 09/24/21

CLIENT: GA-GA Power

Courier: Commercial Fed Ex UPS USPS Client Pace Other: _____

Custody Seal Present? Yes No Seals Intact? Yes No

Date/Initials Person Examining Contents: 9/14/21 KPW

Packing Material: Bubble Wrap Bubble Bags None Other

Biological Tissue Frozen?

Yes No N/A

Thermometer:

IR Gun ID:

TH2214

Type of Ice:

Wet Blue None

Cooler Temp:

3.3

Correction Factor:

Add/Subtract (°C) -0.1

Temp should be above freezing to 6°C

Samples out of temp criteria. Samples on ice, cooling process has begun

Cooler Temp Corrected (°C):

3.2

USDA Regulated Soil N/A, water sample

Did samples originate in a quarantine zone within the United States: CA, NY, or SC (check maps)?

Yes No

Did samples originate from a foreign source (internationally, including Hawaii and Puerto Rico)? Yes No

	Comments/Discrepancy:
Chain of Custody Present?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A 1.
Samples Arrived within Hold Time?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A 2.
Short Hold Time Analysis (<72 hr.)?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A 3.
Rush Turn Around Time Requested?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A 4. 10 Day TAT
Sufficient Volume?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A 5.
Correct Containers Used?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A 6.
-Pace Containers Used?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A
Containers Intact?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A 7.
Dissolved analysis: Samples Field Filtered?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A 8.
Sample Labels Match COC?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A 9.
-Includes Date/Time/ID/Analysis Matrix:	W
Headspace in VOA Vials (>5.6mm)?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A 10.
Trip Blank Present?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A 11.
Trip Blank Custody Seals Present?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A

COMMENTS/SAMPLE DISCREPANCY

Field Data Required? Yes No

B-100 present, even though it is crossed out on the COC.

Lot ID of split containers:

CLIENT NOTIFICATION/RESOLUTION

B-100 on separate project w/ B-62
New COC's received

Person contacted: Daniela Herrera Date/Time: 9/15/21 0901

Project Manager SCURF Review: _____

Date: _____

Project Manager SRF Review: _____

Date: _____



CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Section A Required Client Information: Georgia Power - Coal Combustion Residuals
 Address: 2450 Manor Road Atlanta, GA 30339
 Email: jbruhm@southemco.com
 Phone: (404) 506-7239
 Requested Due Date: 10 Day TAT

Section B Required Project Information: Report To: Joli Abraham
 Copy To: Golder
 Purchase Order #: Plant McDouggh B-62 and B-100
 Project Name: Plant McDouggh B-62 and B-100
 Project #: 168849621

Section C Invoice Information: Attention: sefinco@southemco.com
 Company Name: Golder
 Address:
 Pace Quote: Kevin Herring
 Pace Project Manager:
 Pace Profile #:
 Requested Analysis Filtered (Y/N)
 State / Location: GA

ITEM #	MATRIX	CODE	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	DATE	TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives							Analyses Test	Y/N	Requested Analysis Filtered (Y/N)	TEMP in C	Residual Chlorine (Y/N)	pH = 5.27	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
									H2SO4	HNO3 + Ice	HCl	NaOH + Zn Acetate	Na2S2O3	Methanol	Other									
1	Driving Water	DW	WT	G	9/13/2021	16:55		5	2	3														
2																								
3																								
4																								
5																								
6																								
7																								
8																								
9																								
10																								
ADDITIONAL COMMENTS		REINQUIRED BY / AFFILIATION		DATE		TIME		ACCEPTED BY / AFFILIATION		DATE		TIME		SAMPLE CONDITIONS										
		Aw 999 - New		9/14/2021		17:05				9/14/21		4:05		3.2 Y N Y										

Jude Waguespack / Golder

DATE Sipped: _____

November 04, 2021

Joju Abraham
Georgia Power-CCR
2480 Maner Road
Atlanta, GA 30339

RE: Project: MCDONOUGH RADS
Pace Project No.: 92561190

Dear Joju Abraham:

Enclosed are the analytical results for sample(s) received by the laboratory between September 10, 2021 and September 14, 2021. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

- Pace Analytical Services - Greensburg

If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Nicole D'Oleo
nicole.d'oleo@pacelabs.com
(704)875-9092
Project Manager

Enclosures

cc: Stephen Benda
Daniela Herrera, Golder
Ben Hodges, Georgia Power
Kristen Jurinko
J. Shelby Mobley
Charles Norton, Southern Company
Ms. Lauren Petty, Southern Company
Dawn Prell, Golder Associates Inc.
Tim Richards, Golder Associates - Atlanta



REPORT OF LABORATORY ANALYSIS

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CERTIFICATIONS

Project: MCDONOUGH RADS
Pace Project No.: 92561190

Pace Analytical Services Pennsylvania

1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601
ANAB DOD-ELAP Rad Accreditation #: L2417
Alabama Certification #: 41590
Arizona Certification #: AZ0734
Arkansas Certification
California Certification #: 04222CA
Colorado Certification #: PA01547
Connecticut Certification #: PH-0694
Delaware Certification
EPA Region 4 DW Rad
Florida/TNI Certification #: E87683
Georgia Certification #: C040
Florida: Cert E871149 SEKS WET
Guam Certification
Hawaii Certification
Idaho Certification
Illinois Certification
Indiana Certification
Iowa Certification #: 391
Kansas/TNI Certification #: E-10358
Kentucky Certification #: KY90133
KY WW Permit #: KY0098221
KY WW Permit #: KY0000221
Louisiana DHH/TNI Certification #: LA180012
Louisiana DEQ/TNI Certification #: 4086
Maine Certification #: 2017020
Maryland Certification #: 308
Massachusetts Certification #: M-PA1457
Michigan/PADEP Certification #: 9991

Missouri Certification #: 235
Montana Certification #: Cert0082
Nebraska Certification #: NE-OS-29-14
Nevada Certification #: PA014572018-1
New Hampshire/TNI Certification #: 297617
New Jersey/TNI Certification #: PA051
New Mexico Certification #: PA01457
New York/TNI Certification #: 10888
North Carolina Certification #: 42706
North Dakota Certification #: R-190
Ohio EPA Rad Approval: #41249
Oregon/TNI Certification #: PA200002-010
Pennsylvania/TNI Certification #: 65-00282
Puerto Rico Certification #: PA01457
Rhode Island Certification #: 65-00282
South Dakota Certification
Tennessee Certification #: 02867
Texas/TNI Certification #: T104704188-17-3
Utah/TNI Certification #: PA014572017-9
USDA Soil Permit #: P330-17-00091
Vermont Dept. of Health: ID# VT-0282
Virgin Island/PADEP Certification
Virginia/VELAP Certification #: 9526
Washington Certification #: C868
West Virginia DEP Certification #: 143
West Virginia DHHR Certification #: 9964C
Wisconsin Approve List for Rad
Wyoming Certification #: 8TMS-L

REPORT OF LABORATORY ANALYSIS

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SAMPLE SUMMARY

Project: MCDONOUGH RADS

Pace Project No.: 92561190

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92561190001	B-100	Water	09/13/21 16:55	09/14/21 09:35
92560765001	B-62	Water	09/09/21 15:45	09/10/21 17:40

REPORT OF LABORATORY ANALYSIS

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SAMPLE ANALYTE COUNT

Project: MCDONOUGH RADS

Pace Project No.: 92561190

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
92561190001	B-100	EPA 9315	CLA	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92560765001	B-62	EPA 9315	SLC	1	PASI-PA
		EPA 9320	JC2	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA

PASI-PA = Pace Analytical Services - Greensburg

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: MCDONOUGH RADS

Pace Project No.: 92561190

Sample: B-100 **Lab ID: 92561190001** Collected: 09/13/21 16:55 Received: 09/14/21 09:35 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Pace Analytical Services - Greensburg						
Radium-226	EPA 9315	0.116 ± 0.212 (0.482) C:96% T:NA	pCi/L	10/06/21 12:02	13982-63-3	
Pace Analytical Services - Greensburg						
Radium-228	EPA 9320	0.658 ± 0.401 (0.741) C:62% T:99%	pCi/L	10/04/21 15:06	15262-20-1	
Pace Analytical Services - Greensburg						
Total Radium	Total Radium Calculation	0.774 ± 0.613 (1.22)	pCi/L	10/07/21 15:34	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: MCDONOUGH RADS

Pace Project No.: 92561190

Sample: B-62 **Lab ID: 92560765001** Collected: 09/09/21 15:45 Received: 09/10/21 17:40 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Pace Analytical Services - Greensburg						
Radium-226	EPA 9315	0.757 ± 0.323 (0.388) C:93% T:NA	pCi/L	10/06/21 08:25	13982-63-3	
Pace Analytical Services - Greensburg						
Radium-228	EPA 9320	0.946 ± 0.465 (0.793) C:64% T:86%	pCi/L	10/04/21 14:59	15262-20-1	
Pace Analytical Services - Greensburg						
Total Radium	Total Radium Calculation	1.70 ± 0.788 (1.18)	pCi/L	10/07/21 15:34	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL - RADIOCHEMISTRY

Project: MCDONOUGH RADS

Pace Project No.: 92561190

QC Batch: 466957

Analysis Method: EPA 9315

QC Batch Method: EPA 9315

Analysis Description: 9315 Total Radium

Laboratory: Pace Analytical Services - Greensburg

Associated Lab Samples:

METHOD BLANK: 2255015

Matrix: Water

Associated Lab Samples:

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	0.0260 ± 0.142 (0.353) C:102% T:NA	pCi/L	10/19/21 08:55	

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QUALITY CONTROL - RADIOCHEMISTRY

Project: MCDONOUGH RADS

Pace Project No.: 92561190

QC Batch: 465345

Analysis Method: EPA 9320

QC Batch Method: EPA 9320

Analysis Description: 9320 Radium 228

Laboratory: Pace Analytical Services - Greensburg

Associated Lab Samples: 92561190001

METHOD BLANK: 2247073

Matrix: Water

Associated Lab Samples: 92561190001

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.306 ± 0.283 (0.572) C:72% T:95%	pCi/L	10/04/21 11:58	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

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QUALITY CONTROL - RADIOCHEMISTRY

Project: MCDONOUGH RADS

Pace Project No.: 92561190

QC Batch: 465341

Analysis Method: EPA 9320

QC Batch Method: EPA 9320

Analysis Description: 9320 Radium 228

Laboratory: Pace Analytical Services - Greensburg

Associated Lab Samples:

METHOD BLANK: 2247067

Matrix: Water

Associated Lab Samples:

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.554 ± 0.366 (0.696) C:72% T:88%	pCi/L	09/30/21 11:24	

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QUALITY CONTROL - RADIOCHEMISTRY

Project: MCDONOUGH RADS

Pace Project No.: 92561190

QC Batch: 466410

Analysis Method: EPA 9320

QC Batch Method: EPA 9320

Analysis Description: 9320 Radium 228

Laboratory: Pace Analytical Services - Greensburg

Associated Lab Samples:

METHOD BLANK: 2252279

Matrix: Water

Associated Lab Samples:

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.420 ± 0.367 (0.738) C:65% T:90%	pCi/L	10/07/21 11:22	

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QUALITY CONTROL - RADIOCHEMISTRY

Project: MCDONOUGH RADS

Pace Project No.: 92561190

QC Batch: 465348

Analysis Method: EPA 9320

QC Batch Method: EPA 9320

Analysis Description: 9320 Radium 228

Laboratory: Pace Analytical Services - Greensburg

Associated Lab Samples:

METHOD BLANK: 2247079

Matrix: Water

Associated Lab Samples:

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.625 ± 0.317 (0.544) C:74% T:91%	pCi/L	10/06/21 11:18	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

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QUALITY CONTROL - RADIOCHEMISTRY

Project: MCDONOUGH RADS
Pace Project No.: 92561190

QC Batch: 465347	Analysis Method: EPA 9315
QC Batch Method: EPA 9315	Analysis Description: 9315 Total Radium
	Laboratory: Pace Analytical Services - Greensburg

Associated Lab Samples: 92561190001

METHOD BLANK: 2247077 Matrix: Water

Associated Lab Samples: 92561190001

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	-0.0279 ± 0.217 (0.589) C:92% T:NA	pCi/L	10/06/21 12:00	

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QUALITY CONTROL - RADIOCHEMISTRY

Project: MCDONOUGH RADS

Pace Project No.: 92561190

QC Batch: 465350

Analysis Method: EPA 9315

QC Batch Method: EPA 9315

Analysis Description: 9315 Total Radium

Laboratory: Pace Analytical Services - Greensburg

Associated Lab Samples:

METHOD BLANK: 2247083

Matrix: Water

Associated Lab Samples:

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	0.0502 ± 0.146 (0.360) C:88% T:NA	pCi/L	10/07/21 08:30	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

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QUALITY CONTROL - RADIOCHEMISTRY

Project: MCDONOUGH RADS

Pace Project No.: 92561190

QC Batch: 465343

Analysis Method: EPA 9320

QC Batch Method: EPA 9320

Analysis Description: 9320 Radium 228

Laboratory: Pace Analytical Services - Greensburg

Associated Lab Samples: 92560765001

METHOD BLANK: 2247069

Matrix: Water

Associated Lab Samples: 92560765001

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.209 ± 0.287 (0.612) C:69% T:89%	pCi/L	10/04/21 11:58	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL - RADIOCHEMISTRY

Project: MCDONOUGH RADS

Pace Project No.: 92561190

QC Batch: 466264

Analysis Method: EPA 9315

QC Batch Method: EPA 9315

Analysis Description: 9315 Total Radium

Laboratory: Pace Analytical Services - Greensburg

Associated Lab Samples:

METHOD BLANK: 2251638

Matrix: Water

Associated Lab Samples:

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	0.284 ± 0.229 (0.421) C:95% T:NA	pCi/L	10/08/21 08:00	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL - RADIOCHEMISTRY

Project: MCDONOUGH RADS

Pace Project No.: 92561190

QC Batch: 465344

Analysis Method: EPA 9315

QC Batch Method: EPA 9315

Analysis Description: 9315 Total Radium

Laboratory: Pace Analytical Services - Greensburg

Associated Lab Samples: 92560765001

METHOD BLANK: 2247072

Matrix: Water

Associated Lab Samples: 92560765001

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	0.00717 ± 0.168 (0.443) C:96% T:NA	pCi/L	10/06/21 08:19	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL - RADIOCHEMISTRY

Project: MCDONOUGH RADS

Pace Project No.: 92561190

QC Batch: 465342

Analysis Method: EPA 9315

QC Batch Method: EPA 9315

Analysis Description: 9315 Total Radium

Laboratory: Pace Analytical Services - Greensburg

Associated Lab Samples:

METHOD BLANK: 2247068

Matrix: Water

Associated Lab Samples:

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	0.189 ± 0.181 (0.337) C:97% T:NA	pCi/L	10/06/21 08:11	

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QUALIFIERS

Project: MCDONOUGH RADS

Pace Project No.: 92561190

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

Acid preservation may not be appropriate for 2 Chloroethylvinyl ether.

A separate vial preserved to a pH of 4-5 is recommended in SW846 Chapter 4 for the analysis of Acrolein and Acrylonitrile by EPA Method 8260.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Reported results are not rounded until the final step prior to reporting. Therefore, calculated parameters that are typically reported as "Total" may vary slightly from the sum of the reported component parameters.

Act - Activity

Unc - Uncertainty: SDWA = 1.96 sigma count uncertainty, all other matrices = Expanded Uncertainty (95% confidence interval).

Gamma Spec = Expanded Uncertainty (95.4% Confidence Interval)

(MDC) - Minimum Detectable Concentration

Trac - Tracer Recovery (%)

Carr - Carrier Recovery (%)

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

REPORT OF LABORATORY ANALYSIS

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without the written consent of Pace Analytical Services, LLC.

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: MCDONOUGH RADS

Pace Project No.: 92561190

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92560765001	B-62	EPA 9315	465344		
92561190001	B-100	EPA 9315	465347		
92560765001	B-62	EPA 9320	465343		
92561190001	B-100	EPA 9320	465345		
92560765001	B-62	Total Radium Calculation	467213		
92561190001	B-100	Total Radium Calculation	467213		

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Laboratory receiving samples:

Asheville Eden Greenwood Huntersville Raleigh Mechanicsville Atlanta Kernersville

Sample Condition Upon Receipt

Client Name:

Georgia Power

Project #

WO#: 92561190



Courier: Fed Ex UPS USPS Client
 Commercial Pace Other: _____

Custody Seal Present? Yes No Seals Intact? Yes No

Date/Initials Person Examining Contents: *MT 9/18/21*

Packing Material: Bubble Wrap Bubble Bags None Other

Biological Tissue Frozen? Yes No N/A

Thermometer: IR Gun ID: *230* Type of Ice: Wet Blue None

Cooler Temp: *3.4* Correction Factor: Add/Subtract (°C) *± 0.1*

Temp should be above freezing to 6°C
 Samples out of temp criteria. Samples on ice, cooling process has begun

Cooler Temp Corrected (°C): *3.5*

USDA Regulated Soil (N/A, water sample)

Did samples originate in a quarantine zone within the United States: CA, NY, or SC (check maps)? Yes No

Did samples originate from a foreign source (internationally, including Hawaii and Puerto Rico)? Yes No

			Comments/Discrepancy:
Chain of Custody Present?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A		1.
Samples Arrived within Hold Time?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A		2.
Short Hold Time Analysis (<72 hr.)?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A		3.
Rush Turn Around Time Requested?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A		4.
Sufficient Volume?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A		5.
Correct Containers Used?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A		6.
-Pace Containers Used?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A		
Containers Intact?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A		7.
Dissolved analysis: Samples Field Filtered?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A		8.
Sample Labels Match COC?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A		9.
-Includes Date/Time/ID/Analysis Matrix:	<i>WT</i>		
Headspace in VOA Vials (>5-6mm)?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A		10.
Trip Blank Present?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A		11.
Trip Blank Custody Seals Present?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A		

COMMENTS/SAMPLE DISCREPANCY

Field Data Required? Yes No

Lot ID of split containers:

CLIENT NOTIFICATION/RESOLUTION

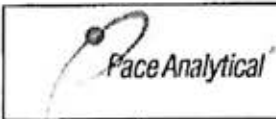
Person contacted: _____ Date/Time: _____

Project Manager SCURF Review: _____

Date: _____

Project Manager SRF Review: _____

Date: _____



Document Name:
Sample Condition Upon Receipt(SCUR)
Document No.:
F-CAR-CS-033-Rev.07

Document Revised: October 28, 2020
Page 1 of 2
Issuing Authority:
Pace Carolinas Quality Office

Laboratory receiving samples:

Asheville Eden Greenwood Huntersville Raleigh Mechanicsville Atlanta Kernersville

Sample Condition Upon Receipt

Client Name: GA Power Project #:

WO# : 92561190
PM: NMG Due Date: 10/01/21
CLIENT: GA-GA Power

Courier: Commercial Fed Ex UPS USPS Client Pace Other:

Custody Seal Present? Yes No Seals Intact? Yes No

Date/Initials Person Examining Contents: 9/14/21 KPW

Packing Material: Bubble Wrap Bubble Bags None Other

Biological Tissue Frozen? Yes No N/A

Thermometer: IR Gun ID: THR214 Type of Ice: Wet Blue None

Cooler Temp: 3.3 Correction Factor: Add/Subtract (°C) -0.1

Temp should be above freezing to 6°C
 Samples out of temp criteria. Samples on ice, cooling process has begun

Cooler Temp Corrected (°C): 3.2

USDA Regulated Soil N/A, water sample)

Did samples originate in a quarantine zone within the United States: CA, NY, or SC (check maps)? Yes No

Did samples originate from a foreign source (internationally, including Hawaii and Puerto Rico)? Yes No

	Comments/Discrepancy:
Chain of Custody Present? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	1.
Samples Arrived within Hold Time? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	2.
Short Hold Time Analysis (<72 hr.)? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	3.
Rush Turn Around Time Requested? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	4. <u>10 Day TAT</u>
Sufficient Volume? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	5.
Correct Containers Used? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	6.
-Pace Containers Used? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Containers Intact? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	7.
Dissolved analysis: Samples Field Filtered? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	8.
Sample Labels Match COC? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	9.
-Includes Date/Time/ID/Analysis Matrix: <u>W</u>	
Headspace in VOA Vials (>5-6mm)? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	10.
Trip Blank Present? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	11.
Trip Blank Custody Seals Present? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	

COMMENTS/SAMPLE DISCREPANCY

Field Data Required? Yes No

B-100 present, even though it is crossed out on the COC.

Lot ID of split containers:

CLIENT NOTIFICATION/RESOLUTION

B-100 on separate project w/ B-62
New COC's received

Person contacted: Daniela Herrera Date/Time: 9/15/21 0901

Project Manager SCURF Review: _____

Date: _____

Project Manager SRF Review: _____

Date: _____



CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Section A Required Client Information: Company: Georgia Power - Coal Combustion Residuals Address: 2480 Marner Road Atlanta, GA 30339

Section B Required Project Information: Report To: Jody Abraham Copy To: Golder

Section C Invoice Information: Attention: scservices@southemco.com Company Name: Address: Pace Quote: Pace Project Manager: Kevin Henning Pace Profile #: Requested Analysis Filtered (Y/N)

Page : 1 Of 1

Section A (continued): Email: jbruham@southemco.com Phone: (404) 506-7239 Requested Due Date: 10 Day TAT

Section B (continued): Purchase Order #: Project Name: Pace McDough B-102 and B-100

Section C (continued): Pace Project Manager: Kevin Henning

Regulatory Agency: State / Location: GA

ITEM #	MATRIX	CODE	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	DATE	TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives							Analyses Test	Requested Analysis Filtered (Y/N)	Residual Chlorine (Y/N)	pH = 5.27
									Unpreserved - Ice	H2SO4	HNO3 + Ice	HCl	NaOH + Zn Acetate	Na2S2O3	Methanol				
1	B-100	WT	G	G	9/13/2021	16:55		5	2	3									
2																			
3																			
4																			
5																			
6																			
7																			
8																			
9																			
10																			

ADDITIONAL COMMENTS: Aw 999 - new

RELINQUISHED BY / AFFILIATION: [Signature] DATE: 9/14/2021 TIME: 17:35

ACCEPTED BY / AFFILIATION: [Signature] DATE: 9/14/21 TIME: 4:35

TEMP in C: 3.2

Received on Ice (Y/N): Y

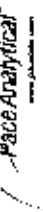
Custody Sealed Cooler (Y/N): N

Samples Intact (Y/N): Y

Jude Waguespack / Golder

DATE Signed: _____

Quality Control Sample Performance Assessment



Analyst Must Manually Enter All Fields Highlighted in Yellow.

Test: Ra-228
 Analysis: VAL
 Date: 10/11/2021
 Worksheet: 62850
 Matrix: WWT

Method Blank Assessment

MB Sample ID	2247073
MB Concentration	0.306
MB 2 Sigma CSU	0.283
MB MDC	0.572
MB Numerical Performance Indicator	2.12
MB Status vs Numerical Indicator	Warning
MB Status vs MDC	Pass

Laboratory Control Sample Assessment

Count Data Spike I.D.	Y
10/4/2021	LCS062850
21-029	37.973
0.10	0.10
0.805	0.816
4.716	4.653
0.231	0.228
5.361	4.280
1.173	0.992
1.06	-0.72
113.68%	91.98%
N/A	N/A
Pass	Pass
135%	135%
60%	60%

Duplicate Sample Assessment

Sample I.D.	Duplicate Sample I.D.	Sample Result (pCtL, g, F)	Duplicate Result (pCtL, g, F)	Sample Duplicate Result (pCtL, g, F)	Sample Duplicate Result 2 Sigma CSU (pCtL, g, F)	Are sample and/or duplicate results below RL?	Duplicate Numerical Performance Indicator	Duplicate Status vs Numerical Indicator
LCS02850	LCS062850	5.361	1.173	4.280	0.992	NO	1.380	Pass
							21.11%	Pass
								35%

Sample Matrix Spike Control Assessment

Sample Collection Date	Sample I.D.	MS/MSD 1	MS/MSD 2
Sample MS I.D.	Sample MSD I.D.		
Sample I.D.	Spike I.D.		
MS/MSD Decay Corrected Spike Concentration (pCt/mL)	Spike Volume Used in MS (mL)		
MS Spike Uncertainty (calculated)	MS Target Conc. (pCtL, g, F)		
MS Target Conc. (pCtL, g, F)	MSD Actual Conc. (pCtL, g, F)		
MS Spike Uncertainty (calculated)	MSD Spike Uncertainty (calculated)		
MSD Spike Uncertainty (calculated)	Sample Result 2 Sigma CSU (pCtL, g, F)		
Sample Result 2 Sigma CSU (pCtL, g, F)	Matrix Spike Result 2 Sigma CSU (pCtL, g, F)		
Matrix Spike Result 2 Sigma CSU (pCtL, g, F)	Sample Matrix Spike Duplicate Result		
Matrix Spike Duplicate Result 2 Sigma CSU (pCtL, g, F)	MS Numerical Performance Indicator		
MS Numerical Performance Indicator	MS Percent Recovery		
MS Percent Recovery	MSD Percent Recovery		
MS Status vs Numerical Indicator	MS Status vs Numerical Indicator		
MS Status vs Recovery	MS Status vs Recovery		
MS/MSD Upper % Recovery Limit	MS/MSD Lower % Recovery Limit		

Matrix Spike/Matrix Duplicate Sample Assessment

Sample I.D.	Sample MS I.D.	Sample MSD I.D.	Matrix Spike Result 2 Sigma CSU (pCtL, g, F)	Matrix Spike Duplicate Result 2 Sigma CSU (pCtL, g, F)	Duplicate Numerical Performance Indicator	Duplicate Status vs Numerical Indicator	MS/MSD Duplicate Status vs RPD	% RPD Limit
Sample I.D.	Sample MS I.D.	Sample MSD I.D.	Matrix Spike Result 2 Sigma CSU (pCtL, g, F)	Matrix Spike Duplicate Result 2 Sigma CSU (pCtL, g, F)	Duplicate Numerical Performance Indicator	Duplicate Status vs Numerical Indicator	MS/MSD Duplicate Status vs RPD	% RPD Limit

* Evaluation of duplicate precision is not applicable if either the sample or duplicate results are below the MDC.

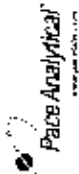
Comments:

*RELATIO
CMA*

Quality Control Sample Performance Assessment

Analyst *Must Manually Enter All Fields Highlighted in Yellow.*

Test: Ra-226
Analyst: CLA
Date: 9/28/2021
Worksheet: 62851
Matrix: DW



Method Blank Assessment	MB Sample ID: 224-1077
	MB Concentration: -0.028
	M/R Counting Uncertainty: 0.217
	MB MDC: 0.589
MB Numerical Performance Indicator:	-0.25
MB Status vs Numerical Indicator:	N/A
MB Status vs MDC:	Pass

Laboratory Control Sample Assessment	LCS ID or #17		Y
	LCS62851	LCS062851	
Count Date:	10/7/2021	10/7/2021	
Spike I.D.:	19-033	19-033	
Decay Corrected Spike Concentration (pCi/ml)	24.033	24.033	
Volume Used (mL)	0.10	0.10	
Aliquot Volume (L, g, F)	0.508	0.508	
Target Conc. (pCi/L, g, F)	4.792	4.734	
Uncertainty (Calculated)	0.098	0.087	
Result (pCi/L, g, F)	4.037	4.418	
LCS01 CSO Counting Uncertainty (pCi/L, g, F)	0.623	0.646	
Numerical Performance Indicator	-2.37	-0.95	
Percent Recovery:	84.25%	93.33%	
Status vs Numerical Indicator:	N/A	N/A	
Status vs Recovery:	Pass	Pass	
Upper % Recovery Limits:	125%	125%	
Lower % Recovery Limits:	75%	75%	

Duplicate Sample Assessment	LCS ID or #17		Y
	LCS62851	LCS062851	
Sample I.D.:	92960766014	92960766014	
Duplicate Sample I.D.:	92560765014DUP	92560765014DUP	
Sample Result (pCi/L, g, F):	4.037	0.428	
Sample Result Counting Uncertainty (pCi/L, g, F):	0.623	0.225	
Sample Duplicate Result (pCi/L, g, F):	4.418	0.178	
Sample Duplicate Result Counting Uncertainty (pCi/L, g, F):	0.646	0.185	
Ave sample and/or duplicate results below RL?	NO	See Below	
Duplicate Numerical Performance Indicator:	-0.832	1.678 OK	
(Based on the LCS01 Percent Recovery) Duplicate RPD	10.22%	82.99%	
Duplicate Status vs Numerical Indicator:	N/A	N/A	
Duplicate Status vs RPD:	Pass	Fail**	
% RPD Limit:	25%	25%	

** Evaluation of duplicate precision & not applicable if either the sample or duplicate results are below the MDC.

Comments:

L-MDCs N/A

*** Right click on spreadsheet to see all assessment details ***

10/21/21
C/M

Sample Matrix Spike Control Assessment	MSMSD 1	MSMSD 2
<p>Sample Collection Date:</p> <p>Sample I.D.:</p> <p>Sample MS I.D.:</p> <p>Sample MS2 I.D.:</p> <p>Spike I.D.:</p> <p>MSMSD Decay Corrected Spike Concentration (pCi/ml):</p> <p>Spike Volume Used in MS (mL):</p> <p>Spike Volume Used in MSD (mL):</p> <p>MS Aliquot (L, g, F):</p> <p>MSD Aliquot (L, g, F):</p> <p>MSD Target Conc (pCi/L, g, F):</p> <p>MS Spike Uncertainty (Calculated):</p> <p>MSD Spike Uncertainty (Calculated):</p>	<p>Sample Result:</p> <p>Sample Matrix Spike Result:</p> <p>Matrix Spike Result Counting Uncertainty (pCi/L, g, F):</p> <p>Matrix Spike Duplicate Result:</p> <p>Matrix Spike Duplicate Result Counting Uncertainty (pCi/L, g, F):</p> <p>MS Numerical Performance Indicator:</p> <p>MSD Numerical Performance Indicator:</p> <p>MS Percent Recovery:</p> <p>MSD Percent Recovery:</p> <p>MS Status vs Numerical Indicator:</p> <p>MSD Status vs Numerical Indicator:</p> <p>MSMSD Upper % Recovery Limits:</p> <p>MSMSD Lower % Recovery Limits:</p>	

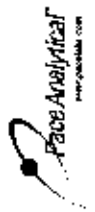
Matrix Spike/Matrix Spike Duplicate Sample Assessment
<p>Sample I.D.:</p> <p>Sample MS I.D.:</p> <p>Sample MS2 I.D.:</p> <p>Matrix Spike Result Counting Uncertainty (pCi/L, g, F):</p> <p>Matrix Spike Duplicate Result Counting Uncertainty (pCi/L, g, F):</p> <p>Duplicate Numerical Performance Indicator:</p> <p>(Based on the Percent Recovery) MS: MSD Duplicate RPD:</p> <p>MS: MSD Duplicate Status vs Numerical Indicator:</p> <p>MS: MSD Duplicate Status vs RPD:</p> <p>% RPD Limit:</p>

10/17/21

Quality Control Sample Performance Assessment

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Test: **Re-228**
 Analyst: **JC2**
 Date: **10/17/2021**
 Worksheet: **62848**
 Matrix: **WI**



Method Blank Assessment

MB Sample ID	2247069
MB Concentration:	0.208
MB 2 Sigma CSU:	0.287
MB MDC:	0.612
MB Numerical Performance Indicator	1.43
MB Status vs Numerical Indicator:	Pass
MB Status vs MDC:	Pass

Laboratory Control Sample Assessment

	LCS0 (Y or N/P)	Y
Count Data	10/4/2021	LCS062848
Decay Corrected Spike Concentration (pCi/mL)	21-029	21-029
Volume Used (mL)	37.973	37.973
Aliquot Volume (L, g, F)	0.10	0.10
Target Conc (pCi/L, g, F)	0.807	0.812
Uncertainty (Calculated)	4.703	4.876
Result (pCi/L, g, F)	0.236	0.229
MS Numerical Performance Indicator	3.772	4.931
MS Status vs Numerical Indicator	0.892	1.094
MS Status vs Recovery	-1.98	0.45
Upper % Recovery Limit:	80.20%	105.45%
Lower % Recovery Limit:	Pass	Pass
	Pass	135%
	60%	60%

Duplicate Sample Assessment

	LCS02848	LCS062848
Sample ID:	LCS02848	LCS062848
Duplicate Sample ID:	3772	3772
Sample Result 2 Sigma CSU (pCi/L, g, F):	0.892	0.892
Sample Duplicate Result (pCi/L, g, F):	4.931	4.931
Sample Duplicate Result 2 Sigma CSU (pCi/L, g, F):	1.094	1.094
Are sample and/or duplicate results below RL?	NO	NO
Duplicate Numerical Performance Indicator:	-1.609	-1.609
Duplicate Status vs Numerical Indicator:	27.20%	27.20%
Duplicate Status vs RPD:	Pass	Pass
% RPD Limit:	36%	36%

Evaluation of duplicate precision is not applicable if either the sample or duplicate results are below the MDC.

Comments:

Sample Matrix Spike Control Assessment

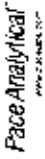
	MS/MSD 1	MS/MSD 2
Sample Collection Date		
Sample ID		
Sample MS ID		
Sample MSD ID		
Spike ID		
MS/MSD Decay Corrected Spike Concentration (pCi/mL)		
Spike Volume Used in MS (mL):		
MS Aliquot (L, g, F):		
MS Target Conc (pCi/L, g, F):		
MSD Aliquot (L, g, F):		
MSD Target Conc (pCi/L, g, F):		
MS Spike Uncertainty (Calculated):		
MSD Spike Uncertainty (Calculated):		
Sample Result 2 Sigma CSU (pCi/L, g, F):		
Sample Matrix Spike Result:		
Matrix Spike Result 2 Sigma CSU (pCi/L, g, F):		
Sample Matrix Spike Duplicate Result:		
Matrix Spike Duplicate Result 2 Sigma CSU (pCi/L, g, F):		
MS Numerical Performance Indicator:		
MS Numerical Performance Indicator:		
MS Percent Recovery:		
MSD Percent Recovery:		
MS Status vs Numerical Indicator:		
MSD Status vs Numerical Indicator:		
MS Status vs Recovery:		
MSD Status vs Recovery:		
MS/MSD Upper % Recovery Limit:		
MS/MSD Lower % Recovery Limit:		

Matrix Spike/Matrix Spike Duplicate Sample Assessment

	MS/MSD 1	MS/MSD 2
Sample ID:		
Sample MS ID:		
Sample MSD ID:		
Sample Matrix Spike Result:		
Matrix Spike Result 2 Sigma CSU (pCi/L, g, F):		
Sample Matrix Spike Duplicate Result:		
Sample Matrix Spike Duplicate Result 2 Sigma CSU (pCi/L, g, F):		
Duplicate Numerical Performance Indicator:		
Duplicate Numerical Performance Indicator:		
(Based on the Percent Recoveries) MS/MSD Duplicate RPD:		
MS/MSD Duplicate Status vs Numerical Indicator:		
MS/MSD Duplicate Status vs RPD:		
% RPD Limit:		

10/10/21
 JC2

Quality Control Sample Performance Assessment



Analyst Must Manually Enter All Fields Highlighted in Yellow

Test: Ra-226
Analyst: SLC
Date: 9/28/2021
Worksheet: 62849
Matrix: DW

Method Blank Assessment	MS/MSD 1	MS/MSD 2
MB Sample ID: 224-012		
MB Concentration: 0.007		
MB Counting Uncertainty: 0.168		
MB MDC: 0.443		
MB Numerical Performance Indicator: 0.08		
MB Status vs Numerical Indicator: N/A		
MB Status vs MDC: Pass		

Laboratory Control Sample Assessment	LCS ID (Y or N)†	Y
Count Date: 10/6/2021	LCS062849	
Spike ID: 18-033	19-033	
Decay Corrected Spike Concentration (pCi/mL): 24.033	24.033	
Volume Used (mL): 0.10	0.10	
Aliquot Volume (L, g, F): 0.503	0.503	
Target Conc (pCi/L, g, F): 4.779	4.791	
Uncertainty (Calculated): 0.057	0.067	
Result (pCi/L, g, F): 5.249	5.218	
LCS/LCSD Counting Uncertainty (pCi/L, g, F): 0.891	0.720	
Numerical Performance Indicator: 1.33	1.16	
Percent Recovery: 109.83%	108.93%	
Status vs Numerical Indicator: N/A	N/A	
Status vs Recovery: Pass	Pass	
Upper % Recovery Limits: 125%	125%	
Lower % Recovery Limits: 75%	75%	

Duplicate Sample Assessment	LCS ID	Y
Sample ID: 92560766017	92560766017	
Duplicate Sample ID: 92560766017	92560766017	
Sample Result (pCi/L, g, F): 0.363	0.363	
Sample Result Counting Uncertainty (pCi/L, g, F): 0.277	0.277	
Sample Duplicate Result (pCi/L, g, F): 0.174	0.174	
Sample Duplicate Result Counting Uncertainty (pCi/L, g, F): 0.199	0.199	
Are sample and/or duplicate results below RL? NO	See Below	
Duplicate Numerical Performance Indicator: 0.680	0.680	
(Based on the LCS/LCSD Percent Recoveries) Duplicate I/I/D: 0.82%	0.82%	
Duplicate Status vs Numerical Indicator: N/A	N/A	
Duplicate Status vs RPD: Pass	Pass	
% RPD Limit: 25%	25%	

Sample Matrix Spike Control Assessment	MS/MSD 1	MS/MSD 2
Sample Collection Date: Sample ID: Sample MS ID: Sample MSD ID: Spike I.D.: Spike I.D.:		
MS/MSD Decay Carried Spike Concentration (pCi/mL): Spike Volume Used in MS (mL): Spike Volume Used in MSD (mL): MS Aliquot (L, g, F): MS Target Conc (pCi/L, g, F): MSD Aliquot (L, g, F): MS Spike Uncertainty (calculated): MS Spike Uncertainty (calculated): MSD Spike Uncertainty (calculated):		
Sample Result Counting Uncertainty (pCi/L, g, F): Sample Matrix Spike Result: Matrix Spike Result Counting Uncertainty (pCi/L, g, F): Matrix Spike Duplicate Result Counting Uncertainty (pCi/L, g, F): Matrix Spike Duplicate Result Counting Uncertainty (pCi/L, g, F): MS Numerical Performance Indicator: MSD Numerical Performance Indicator: MS Percent Recovery: MSD Percent Recovery: MS Status vs Numerical Indicator: MSD Status vs Numerical Indicator: MS Status vs Recovery: MSD Status vs Recovery: MS/MSD Upper % Recovery Limit: MS/MSD Lower % Recovery Limit:		

Matrix Spike/Matrix Spike Duplicate Sample Assessment
Sample ID: Sample MS ID: Sample MSD ID: Matrix Spike Result Counting Uncertainty (pCi/L, g, F): Sample Matrix Spike Duplicate Result Counting Uncertainty (pCi/L, g, F): Matrix Spike Duplicate Result Counting Uncertainty (pCi/L, g, F): Duplicate Numerical Performance Indicator (Based on the Percent Recoveries) MS: MSD Duplicate RPD: MS: MSD Duplicate Status vs Numerical Indicator: MS: MSD Duplicate Status vs RPD: % RPD Limit:

*** Evaluation of duplicate precision is not applicable if either the sample or duplicate results are below the MDC

Comments:

... Results are not reportable due to unacceptable precision N/A

17/10/2021 10:01 AM
17/10/2021 10:01 AM

October 07, 2021

Joju Abraham
Georgia Power-CCR
2480 Maner Road
Atlanta, GA 30339

RE: Project: MCDONOUGH AP-1 ASSESSMENT
Pace Project No.: 92561637

Dear Joju Abraham:

Enclosed are the analytical results for sample(s) received by the laboratory between September 16, 2021 and September 17, 2021. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

- Pace Analytical Services - Asheville
- Pace Analytical Services - Charlotte
- Pace Analytical Services - Peachtree Corners, GA

If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Nicole D'Oleo
nicole.d'oleo@pacelabs.com
(704)875-9092
Project Manager

Enclosures

cc: Stephen Benda
Daniela Herrera, Golder
Ben Hodges, Georgia Power
Kristen Jurinko
J. Shelby Mobley
Charles Norton, Southern Company
Ms. Lauren Petty, Southern Company
Dawn Prell, Golder Associates Inc.
Tim Richards, Golder Associates - Atlanta



REPORT OF LABORATORY ANALYSIS

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CERTIFICATIONS

Project: MCDONOUGH AP-1 ASSESSMENT

Pace Project No.: 92561637

Pace Analytical Services Charlotte

9800 Kinsey Ave. Ste 100, Huntersville, NC 28078
Louisiana/NELAP Certification # LA170028
North Carolina Drinking Water Certification #: 37706
North Carolina Field Services Certification #: 5342
North Carolina Wastewater Certification #: 12

South Carolina Certification #: 99006001
Florida/NELAP Certification #: E87627
Kentucky UST Certification #: 84
Virginia/VELAP Certification #: 460221

Pace Analytical Services Asheville

2225 Riverside Drive, Asheville, NC 28804
Florida/NELAP Certification #: E87648
North Carolina Drinking Water Certification #: 37712

North Carolina Wastewater Certification #: 40
South Carolina Certification #: 99030001
Virginia/VELAP Certification #: 460222

Pace Analytical Services Peachtree Corners

110 Technology Pkwy, Peachtree Corners, GA 30092
Florida DOH Certification #: E87315
Georgia DW Inorganics Certification #: 812

North Carolina Certification #: 381
South Carolina Certification #: 98011001

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SAMPLE SUMMARY

Project: MCDONOUGH AP-1 ASSESSMENT

Pace Project No.: 92561637

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92561637001	B-105D	Water	09/15/21 15:10	09/16/21 09:06
92561637002	B-112D	Water	09/16/21 12:13	09/17/21 17:06
92561637003	B-113D	Water	09/17/21 15:19	09/17/21 17:06
92561637004	EB-6	Water	09/17/21 14:55	09/17/21 17:06

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SAMPLE ANALYTE COUNT

Project: MCDONOUGH AP-1 ASSESSMENT

Pace Project No.: 92561637

Lab ID	Sample ID	Method	Analysts	Analytes Reported
92561637001	B-105D	EPA 6010D	KH	1
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2011	ALW	1
		EPA 300.0 Rev 2.1 1993	CDC	3
92561637002	B-112D	EPA 6010D	KH	1
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2011	ALW	1
		EPA 300.0 Rev 2.1 1993	CDC	3
92561637003	B-113D	EPA 6010D	KH	1
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2011	ALW	1
		EPA 300.0 Rev 2.1 1993	CDC	3
92561637004	EB-6	EPA 6010D	KH	1
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2011	ALW	1
		EPA 300.0 Rev 2.1 1993	CDC	3

PASI-A = Pace Analytical Services - Asheville

PASI-C = Pace Analytical Services - Charlotte

PASI-GA = Pace Analytical Services - Peachtree Corners, GA

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: MCDONOUGH AP-1 ASSESSMENT
Pace Project No.: 92561637

Sample: B-105D		Lab ID: 92561637001		Collected: 09/15/21 15:10		Received: 09/16/21 09:06		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data									
Analytical Method: Pace Analytical Services - Charlotte									
Performed by	CUSTOMER				1		09/16/21 11:16		
pH	6.38	Std. Units			1		09/16/21 11:16		
6010D ATL ICP									
Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA									
Calcium	72.7	mg/L	1.0	0.12	1	09/30/21 10:15	09/30/21 18:33	7440-70-2	M1
6020 MET ICPMS									
Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA									
Antimony	0.0082	mg/L	0.0030	0.00078	1	09/24/21 08:24	09/24/21 17:59	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0011	1	09/24/21 08:24	09/24/21 17:59	7440-38-2	
Barium	0.037	mg/L	0.0050	0.00067	1	09/24/21 08:24	09/24/21 17:59	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	09/24/21 08:24	09/24/21 17:59	7440-41-7	
Boron	0.76	mg/L	0.040	0.0086	1	09/24/21 08:24	09/24/21 17:59	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	09/24/21 08:24	09/24/21 17:59	7440-43-9	
Chromium	0.0012J	mg/L	0.0050	0.0011	1	09/24/21 08:24	09/24/21 17:59	7440-47-3	
Cobalt	0.0065	mg/L	0.0050	0.00039	1	09/24/21 08:24	09/24/21 17:59	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	09/24/21 08:24	09/24/21 17:59	7439-92-1	
Lithium	0.014J	mg/L	0.030	0.00073	1	09/24/21 08:24	09/24/21 17:59	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	09/24/21 08:24	09/24/21 17:59	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	09/24/21 08:24	09/24/21 17:59	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	09/24/21 08:24	09/24/21 17:59	7440-28-0	
7470 Mercury									
Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA									
Mercury	ND	mg/L	0.00020	0.000078	1	09/28/21 11:30	09/28/21 19:46	7439-97-6	
2540C Total Dissolved Solids									
Analytical Method: SM 2540C-2011 Pace Analytical Services - Peachtree Corners, GA									
Total Dissolved Solids	455	mg/L	10.0	10.0	1		09/21/21 19:08		
300.0 IC Anions 28 Days									
Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville									
Chloride	17.4	mg/L	1.0	0.60	1		09/18/21 02:49	16887-00-6	
Fluoride	0.078J	mg/L	0.10	0.050	1		09/18/21 02:49	16984-48-8	
Sulfate	240	mg/L	5.0	2.5	5		09/18/21 12:50	14808-79-8	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: MCDONOUGH AP-1 ASSESSMENT
Pace Project No.: 92561637

Sample: B-112D		Lab ID: 92561637002		Collected: 09/16/21 12:13		Received: 09/17/21 17:06		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data									
Analytical Method: Pace Analytical Services - Charlotte									
Performed by	CUSTOMER				1		09/20/21 14:51		
pH	6.74	Std. Units			1		09/20/21 14:51		
6010D ATL ICP									
Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA									
Calcium	28.4	mg/L	1.0	0.12	1	09/30/21 10:15	09/30/21 19:45	7440-70-2	
6020 MET ICPMS									
Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA									
Antimony	ND	mg/L	0.0030	0.00078	1	09/27/21 12:10	09/28/21 15:55	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0011	1	09/27/21 12:10	09/28/21 15:55	7440-38-2	
Barium	0.0032J	mg/L	0.0050	0.00067	1	09/27/21 12:10	09/28/21 15:55	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	09/27/21 12:10	09/28/21 15:55	7440-41-7	
Boron	0.27	mg/L	0.040	0.0086	1	09/27/21 12:10	09/28/21 15:55	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	09/27/21 12:10	09/28/21 15:55	7440-43-9	
Chromium	0.0014J	mg/L	0.0050	0.0011	1	09/27/21 12:10	09/28/21 15:55	7440-47-3	
Cobalt	0.00054J	mg/L	0.0050	0.00039	1	09/27/21 12:10	09/28/21 15:55	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	09/27/21 12:10	09/28/21 15:55	7439-92-1	
Lithium	0.0038J	mg/L	0.030	0.00073	1	09/27/21 12:10	09/28/21 15:55	7439-93-2	
Molybdenum	0.032	mg/L	0.010	0.00074	1	09/27/21 12:10	09/28/21 15:55	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	09/27/21 12:10	09/28/21 15:55	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	09/27/21 12:10	09/28/21 15:55	7440-28-0	
7470 Mercury									
Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA									
Mercury	ND	mg/L	0.00020	0.000078	1	09/28/21 11:30	09/28/21 19:57	7439-97-6	
2540C Total Dissolved Solids									
Analytical Method: SM 2540C-2011 Pace Analytical Services - Peachtree Corners, GA									
Total Dissolved Solids	162	mg/L	10.0	10.0	1		09/23/21 20:02		
300.0 IC Anions 28 Days									
Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville									
Chloride	2.7	mg/L	1.0	0.60	1		09/21/21 18:35	16887-00-6	
Fluoride	0.34	mg/L	0.10	0.050	1		09/21/21 18:35	16984-48-8	
Sulfate	21.2	mg/L	1.0	0.50	1		09/21/21 18:35	14808-79-8	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: MCDONOUGH AP-1 ASSESSMENT
Pace Project No.: 92561637

Sample: B-113D		Lab ID: 92561637003		Collected: 09/17/21 15:19		Received: 09/17/21 17:06		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data									
Analytical Method: Pace Analytical Services - Charlotte									
Performed by	CUSTOMER				1		09/20/21 14:51		
pH	7.97	Std. Units			1		09/20/21 14:51		
6010D ATL ICP									
Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA									
Calcium	44.1	mg/L	1.0	0.12	1	09/30/21 10:15	09/30/21 19:50	7440-70-2	
6020 MET ICPMS									
Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA									
Antimony	ND	mg/L	0.0030	0.00078	1	09/27/21 12:10	09/28/21 16:01	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0011	1	09/27/21 12:10	09/28/21 16:01	7440-38-2	
Barium	0.0048J	mg/L	0.0050	0.00067	1	09/27/21 12:10	09/28/21 16:01	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	09/27/21 12:10	09/28/21 16:01	7440-41-7	
Boron	0.089	mg/L	0.040	0.0086	1	09/27/21 12:10	09/28/21 16:01	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	09/27/21 12:10	09/28/21 16:01	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	09/27/21 12:10	09/28/21 16:01	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00039	1	09/27/21 12:10	09/28/21 16:01	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	09/27/21 12:10	09/28/21 16:01	7439-92-1	
Lithium	0.013J	mg/L	0.030	0.00073	1	09/27/21 12:10	09/28/21 16:01	7439-93-2	
Molybdenum	0.074	mg/L	0.010	0.00074	1	09/27/21 12:10	09/28/21 16:01	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	09/27/21 12:10	09/28/21 16:01	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	09/27/21 12:10	09/28/21 16:01	7440-28-0	
7470 Mercury									
Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA									
Mercury	ND	mg/L	0.00020	0.000078	1	09/28/21 11:30	09/28/21 20:00	7439-97-6	
2540C Total Dissolved Solids									
Analytical Method: SM 2540C-2011 Pace Analytical Services - Peachtree Corners, GA									
Total Dissolved Solids	329	mg/L	10.0	10.0	1		09/23/21 20:02		
300.0 IC Anions 28 Days									
Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville									
Chloride	48.8	mg/L	1.0	0.60	1		09/21/21 18:51	16887-00-6	
Fluoride	0.87	mg/L	0.10	0.050	1		09/21/21 18:51	16984-48-8	
Sulfate	89.1	mg/L	1.0	0.50	1		09/21/21 18:51	14808-79-8	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: MCDONOUGH AP-1 ASSESSMENT

Pace Project No.: 92561637

Sample: EB-6		Lab ID: 92561637004		Collected: 09/17/21 14:55		Received: 09/17/21 17:06		Matrix: Water		
Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual	
			Limit	MDL	DF					
6010D ATL ICP		Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Calcium	ND	mg/L	1.0	0.12	1	09/30/21 10:15	09/30/21 19:55	7440-70-2		
6020 MET ICPMS		Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	ND	mg/L	0.0030	0.00078	1	09/27/21 12:10	09/28/21 16:18	7440-36-0		
Arsenic	ND	mg/L	0.0050	0.0011	1	09/27/21 12:10	09/28/21 16:18	7440-38-2		
Barium	ND	mg/L	0.0050	0.00067	1	09/27/21 12:10	09/28/21 16:18	7440-39-3		
Beryllium	ND	mg/L	0.00050	0.000054	1	09/27/21 12:10	09/28/21 16:18	7440-41-7		
Boron	ND	mg/L	0.040	0.0086	1	09/27/21 12:10	09/28/21 16:18	7440-42-8		
Cadmium	ND	mg/L	0.00050	0.00011	1	09/27/21 12:10	09/28/21 16:18	7440-43-9		
Chromium	ND	mg/L	0.0050	0.0011	1	09/27/21 12:10	09/28/21 16:18	7440-47-3		
Cobalt	ND	mg/L	0.0050	0.00039	1	09/27/21 12:10	09/28/21 16:18	7440-48-4		
Lead	ND	mg/L	0.0010	0.00089	1	09/27/21 12:10	09/28/21 16:18	7439-92-1		
Lithium	ND	mg/L	0.030	0.00073	1	09/27/21 12:10	09/28/21 16:18	7439-93-2		
Molybdenum	ND	mg/L	0.010	0.00074	1	09/27/21 12:10	09/28/21 16:18	7439-98-7		
Selenium	ND	mg/L	0.0050	0.0014	1	09/27/21 12:10	09/28/21 16:18	7782-49-2		
Thallium	ND	mg/L	0.0010	0.00018	1	09/27/21 12:10	09/28/21 16:18	7440-28-0		
7470 Mercury		Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00020	0.000078	1	09/28/21 11:30	09/28/21 20:03	7439-97-6		
2540C Total Dissolved Solids		Analytical Method: SM 2540C-2011 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	ND	mg/L	10.0	10.0	1		09/23/21 20:02			
300.0 IC Anions 28 Days		Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	ND	mg/L	1.0	0.60	1		09/21/21 19:07	16887-00-6		
Fluoride	ND	mg/L	0.10	0.050	1		09/21/21 19:07	16984-48-8		
Sulfate	ND	mg/L	1.0	0.50	1		09/21/21 19:07	14808-79-8		

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: MCDONOUGH AP-1 ASSESSMENT
Pace Project No.: 92561637

QC Batch: 650016 Analysis Method: EPA 6010D
QC Batch Method: EPA 3010A Analysis Description: 6010D ATL
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92561637001, 92561637002, 92561637003, 92561637004

METHOD BLANK: 3409429 Matrix: Water
Associated Lab Samples: 92561637001, 92561637002, 92561637003, 92561637004

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Calcium	mg/L	ND	1.0	0.12	09/30/21 18:01	

LABORATORY CONTROL SAMPLE: 3409430

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Calcium	mg/L	1	1.1	109	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3409431 3409432

Parameter	Units	92561637001		3409432		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result						
Calcium	mg/L	72.7	1	1	72.0	73.0	-71	25	75-125	1	20 M1

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: MCDONOUGH AP-1 ASSESSMENT
Pace Project No.: 92561637

QC Batch: 649183 Analysis Method: EPA 6020B
QC Batch Method: EPA 3005A Analysis Description: 6020 MET
Laboratory: Pace Analytical Services - Peachtree Corners, GA

Associated Lab Samples: 92561637001

METHOD BLANK: 3405029 Matrix: Water
Associated Lab Samples: 92561637001

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	mg/L	ND	0.0030	0.00078	09/24/21 15:43	
Arsenic	mg/L	ND	0.0050	0.0011	09/24/21 15:43	
Barium	mg/L	ND	0.0050	0.00067	09/24/21 15:43	
Beryllium	mg/L	ND	0.00050	0.000054	09/24/21 15:43	
Boron	mg/L	ND	0.040	0.0086	09/24/21 15:43	
Cadmium	mg/L	ND	0.00050	0.00011	09/24/21 15:43	
Chromium	mg/L	ND	0.0050	0.0011	09/24/21 15:43	
Cobalt	mg/L	ND	0.0050	0.00039	09/24/21 15:43	
Lead	mg/L	ND	0.0010	0.00089	09/24/21 15:43	
Lithium	mg/L	ND	0.030	0.00073	09/24/21 15:43	
Molybdenum	mg/L	ND	0.010	0.00074	09/24/21 15:43	
Selenium	mg/L	ND	0.0050	0.0014	09/24/21 15:43	
Thallium	mg/L	ND	0.0010	0.00018	09/24/21 15:43	

LABORATORY CONTROL SAMPLE: 3405030

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	mg/L	0.1	0.10	102	80-120	
Arsenic	mg/L	0.1	0.095	95	80-120	
Barium	mg/L	0.1	0.097	97	80-120	
Beryllium	mg/L	0.1	0.10	102	80-120	
Boron	mg/L	1	1.0	103	80-120	
Cadmium	mg/L	0.1	0.10	103	80-120	
Chromium	mg/L	0.1	0.10	102	80-120	
Cobalt	mg/L	0.1	0.10	103	80-120	
Lead	mg/L	0.1	0.099	99	80-120	
Lithium	mg/L	0.1	0.10	101	80-120	
Molybdenum	mg/L	0.1	0.099	99	80-120	
Selenium	mg/L	0.1	0.094	94	80-120	
Thallium	mg/L	0.1	0.098	98	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3405031 3405032

Parameter	Units	92560768019 Result	MS		MSD		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
			Spike Conc.	MSD Spike Conc.	MS Result	MSD Result						
Antimony	mg/L	ND	0.1	0.1	0.10	0.10	103	102	75-125	1	20	
Arsenic	mg/L	0.0018J	0.1	0.1	0.098	0.098	96	96	75-125	0	20	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: MCDONOUGH AP-1 ASSESSMENT

Pace Project No.: 92561637

Parameter	Units	3405031		3405032		MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		92560768019 Result	MS Spike Conc.	MSD Spike Conc.	MS Result								
Barium	mg/L	0.016	0.1	0.1	0.12	0.12	105	104	75-125	1	20		
Beryllium	mg/L	0.011	0.1	0.1	0.094	0.092	82	80	75-125	2	20		
Boron	mg/L	0.61	1	1	1.4	1.4	83	77	75-125	4	20		
Cadmium	mg/L	0.00035J	0.1	0.1	0.10	0.10	100	101	75-125	1	20		
Chromium	mg/L	ND	0.1	0.1	0.098	0.097	98	97	75-125	1	20		
Cobalt	mg/L	0.28	0.1	0.1	0.37	0.36	91	82	75-125	2	20		
Lead	mg/L	ND	0.1	0.1	0.092	0.094	92	94	75-125	3	20		
Lithium	mg/L	0.085	0.1	0.1	0.16	0.16	78	72	75-125	4	20	M1	
Molybdenum	mg/L	ND	0.1	0.1	0.10	0.10	100	101	75-125	1	20		
Selenium	mg/L	0.0041J	0.1	0.1	0.10	0.099	96	95	75-125	1	20		
Thallium	mg/L	ND	0.1	0.1	0.094	0.095	94	95	75-125	1	20		

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QUALITY CONTROL DATA

Project: MCDONOUGH AP-1 ASSESSMENT
Pace Project No.: 92561637

QC Batch: 649484 Analysis Method: EPA 6020B
QC Batch Method: EPA 3005A Analysis Description: 6020 MET
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92561637002, 92561637003, 92561637004

METHOD BLANK: 3406420 Matrix: Water
Associated Lab Samples: 92561637002, 92561637003, 92561637004

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	mg/L	ND	0.0030	0.00078	09/28/21 15:09	
Arsenic	mg/L	ND	0.0050	0.0011	09/28/21 15:09	
Barium	mg/L	ND	0.0050	0.00067	09/28/21 15:09	
Beryllium	mg/L	ND	0.00050	0.000054	09/28/21 15:09	
Boron	mg/L	ND	0.040	0.0086	09/28/21 15:09	
Cadmium	mg/L	ND	0.00050	0.00011	09/28/21 15:09	
Chromium	mg/L	ND	0.0050	0.0011	09/28/21 15:09	
Cobalt	mg/L	ND	0.0050	0.00039	09/28/21 15:09	
Lead	mg/L	ND	0.0010	0.00089	09/28/21 15:09	
Lithium	mg/L	ND	0.030	0.00073	09/28/21 15:09	
Molybdenum	mg/L	ND	0.010	0.00074	09/28/21 15:09	
Selenium	mg/L	ND	0.0050	0.0014	09/28/21 15:09	
Thallium	mg/L	ND	0.0010	0.00018	09/28/21 15:09	

LABORATORY CONTROL SAMPLE: 3406421

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	mg/L	0.1	0.096	96	80-120	
Arsenic	mg/L	0.1	0.097	97	80-120	
Barium	mg/L	0.1	0.093	93	80-120	
Beryllium	mg/L	0.1	0.092	92	80-120	
Boron	mg/L	1	0.95	95	80-120	
Cadmium	mg/L	0.1	0.10	100	80-120	
Chromium	mg/L	0.1	0.10	101	80-120	
Cobalt	mg/L	0.1	0.10	100	80-120	
Lead	mg/L	0.1	0.093	93	80-120	
Lithium	mg/L	0.1	0.094	94	80-120	
Molybdenum	mg/L	0.1	0.096	96	80-120	
Selenium	mg/L	0.1	0.098	98	80-120	
Thallium	mg/L	0.1	0.093	93	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3406422 3406423

Parameter	Units	92562762002 Result	MS		MSD		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
			Spike Conc.	MS Result	Spike Conc.	MSD Result						
Antimony	mg/L	ND	0.1	0.1	0.099	0.10	99	100	75-125	1	20	
Arsenic	mg/L	ND	0.1	0.1	0.098	0.10	98	101	75-125	3	20	

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QUALITY CONTROL DATA

Project: MCDONOUGH AP-1 ASSESSMENT

Pace Project No.: 92561637

Parameter	Units	3406422		3406423		MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		92562762002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result								
Barium	mg/L	138 ug/L	0.1	0.1	0.23	0.24	94	105	75-125	4	20		
Beryllium	mg/L	ND	0.1	0.1	0.092	0.093	92	93	75-125	1	20		
Boron	mg/L	163 ug/L	1	1	1.1	1.1	97	98	75-125	1	20		
Cadmium	mg/L	ND	0.1	0.1	0.099	0.10	99	100	75-125	1	20		
Chromium	mg/L	ND	0.1	0.1	0.099	0.10	98	101	75-125	3	20		
Cobalt	mg/L	ND	0.1	0.1	0.096	0.099	96	99	75-125	3	20		
Lead	mg/L	ND	0.1	0.1	0.089	0.088	89	88	75-125	1	20		
Lithium	mg/L	ND	0.1	0.1	0.098	0.10	93	95	75-125	2	20		
Molybdenum	mg/L	ND	0.1	0.1	0.11	0.10	102	102	75-125	0	20		
Selenium	mg/L	ND	0.1	0.1	0.098	0.10	98	100	75-125	3	20		
Thallium	mg/L	ND	0.1	0.1	0.090	0.090	90	90	75-125	0	20		

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QUALITY CONTROL DATA

Project: MCDONOUGH AP-1 ASSESSMENT

Pace Project No.: 92561637

QC Batch:	649668	Analysis Method:	EPA 7470A
QC Batch Method:	EPA 7470A	Analysis Description:	7470 Mercury
		Laboratory:	Pace Analytical Services - Peachtree Corners, GA

Associated Lab Samples: 92561637001, 92561637002, 92561637003, 92561637004

METHOD BLANK: 3407115 Matrix: Water
Associated Lab Samples: 92561637001, 92561637002, 92561637003, 92561637004

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	mg/L	ND	0.00020	0.000078	09/28/21 19:41	

LABORATORY CONTROL SAMPLE: 3407116

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	mg/L	0.0025	0.0024	98	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3407117 3407118

Parameter	Units	3407117		3407118		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result						
Mercury	mg/L	ND	0.0025	0.0025	0.0025	98	99	75-125	1	20	

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QUALITY CONTROL DATA

Project: MCDONOUGH AP-1 ASSESSMENT

Pace Project No.: 92561637

QC Batch: 648470	Analysis Method: SM 2540C-2011
QC Batch Method: SM 2540C-2011	Analysis Description: 2540C Total Dissolved Solids
	Laboratory: Pace Analytical Services - Peachtree Corners, GA

Associated Lab Samples: 92561637001

METHOD BLANK: 3400865 Matrix: Water

Associated Lab Samples: 92561637001

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	ND	10.0	10.0	09/21/21 19:07	

LABORATORY CONTROL SAMPLE: 3400866

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	400	400	100	90-111	

SAMPLE DUPLICATE: 3400867

Parameter	Units	92562042001 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	78.0	74.0	5	10	

SAMPLE DUPLICATE: 3400868

Parameter	Units	92560768028 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	ND	ND		10	

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QUALITY CONTROL DATA

Project: MCDONOUGH AP-1 ASSESSMENT

Pace Project No.: 92561637

QC Batch:	649122	Analysis Method:	SM 2540C-2011
QC Batch Method:	SM 2540C-2011	Analysis Description:	2540C Total Dissolved Solids
		Laboratory:	Pace Analytical Services - Peachtree Corners, GA

Associated Lab Samples: 92561637002, 92561637003, 92561637004

METHOD BLANK: 3404908 Matrix: Water

Associated Lab Samples: 92561637002, 92561637003, 92561637004

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	ND	10.0	10.0	09/23/21 20:00	

LABORATORY CONTROL SAMPLE: 3404909

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	400	397	99	90-111	

SAMPLE DUPLICATE: 3404910

Parameter	Units	92562006012 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	644	678	5	10	

SAMPLE DUPLICATE: 3404911

Parameter	Units	92561303008 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	113	127	12	10	D6

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QUALITY CONTROL DATA

Project: MCDONOUGH AP-1 ASSESSMENT

Pace Project No.: 92561637

QC Batch: 647979 Analysis Method: EPA 300.0 Rev 2.1 1993
 QC Batch Method: EPA 300.0 Rev 2.1 1993 Analysis Description: 300.0 IC Anions
 Laboratory: Pace Analytical Services - Asheville

Associated Lab Samples: 92561637001

METHOD BLANK: 3398609 Matrix: Water

Associated Lab Samples: 92561637001

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	0.60	09/17/21 23:38	
Fluoride	mg/L	ND	0.10	0.050	09/17/21 23:38	
Sulfate	mg/L	ND	1.0	0.50	09/17/21 23:38	

LABORATORY CONTROL SAMPLE: 3398610

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	50	48.7	97	90-110	
Fluoride	mg/L	2.5	2.5	99	90-110	
Sulfate	mg/L	50	52.1	104	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3398611 3398612

Parameter	Units	MS		MSD		MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		92561816013	Result	Spike Conc.	Spike Conc.								
Chloride	mg/L	11900	50	50	50	12800	13000	1830	2190	90-110	1	10	M1
Fluoride	mg/L	3.6	2.5	2.5	2.5	4.3	21.0	29	698	90-110	132	10	M1,R1
Sulfate	mg/L	8660	50	50	50	9380	9600	1430	1880	90-110	2	10	M1

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3398613 3398614

Parameter	Units	MS		MSD		MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		92560768026	Result	Spike Conc.	Spike Conc.								
Chloride	mg/L	29.9	50	50	50	65.4	66.1	71	72	90-110	1	10	M1
Fluoride	mg/L	0.098J	2.5	2.5	2.5	2.8	2.8	109	109	90-110	0	10	
Sulfate	mg/L	325	50	50	50	365	368	81	86	90-110	1	10	M1

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QUALITY CONTROL DATA

Project: MCDONOUGH AP-1 ASSESSMENT
Pace Project No.: 92561637

QC Batch: 648429 Analysis Method: EPA 300.0 Rev 2.1 1993
QC Batch Method: EPA 300.0 Rev 2.1 1993 Analysis Description: 300.0 IC Anions
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 92561637002, 92561637003, 92561637004

METHOD BLANK: 3400731 Matrix: Water
Associated Lab Samples: 92561637002, 92561637003, 92561637004

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	0.60	09/21/21 14:57	
Fluoride	mg/L	ND	0.10	0.050	09/21/21 14:57	
Sulfate	mg/L	ND	1.0	0.50	09/21/21 14:57	

LABORATORY CONTROL SAMPLE: 3400732

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	50	51.1	102	90-110	
Fluoride	mg/L	2.5	2.5	99	90-110	
Sulfate	mg/L	50	52.2	104	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3400733 3400734

Parameter	Units	MS		MSD		MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		92561303004	Result	Spike Conc.	Spike Conc.								
Chloride	mg/L	5.6	50	50	56.6	56.8	102	103	90-110	0	10		
Fluoride	mg/L	0.084J	2.5	2.5	3.0	3.0	118	118	90-110	0	10	M1	
Sulfate	mg/L	95.0	50	50	129	129	67	68	90-110	0	10	M1	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3400735 3400736

Parameter	Units	MS		MSD		MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		92561637004	Result	Spike Conc.	Spike Conc.								
Chloride	mg/L	ND	50	50	50.3	50.7	101	101	90-110	1	10		
Fluoride	mg/L	ND	2.5	2.5	2.4	2.5	97	98	90-110	1	10		
Sulfate	mg/L	ND	50	50	52.1	52.5	104	105	90-110	1	10		

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QUALIFIERS

Project: MCDONOUGH AP-1 ASSESSMENT

Pace Project No.: 92561637

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

Acid preservation may not be appropriate for 2 Chloroethylvinyl ether.

A separate vial preserved to a pH of 4-5 is recommended in SW846 Chapter 4 for the analysis of Acrolein and Acrylonitrile by EPA Method 8260.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Reported results are not rounded until the final step prior to reporting. Therefore, calculated parameters that are typically reported as "Total" may vary slightly from the sum of the reported component parameters.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

ANALYTE QUALIFIERS

D6 The precision between the sample and sample duplicate exceeded laboratory control limits.

M1 Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

R1 RPD value was outside control limits.

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: MCDONOUGH AP-1 ASSESSMENT
Pace Project No.: 92561637

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92561637001	B-105D				
92561637002	B-112D				
92561637003	B-113D				
92561637001	B-105D	EPA 3010A	650016	EPA 6010D	650179
92561637002	B-112D	EPA 3010A	650016	EPA 6010D	650179
92561637003	B-113D	EPA 3010A	650016	EPA 6010D	650179
92561637004	EB-6	EPA 3010A	650016	EPA 6010D	650179
92561637001	B-105D	EPA 3005A	649183	EPA 6020B	649262
92561637002	B-112D	EPA 3005A	649484	EPA 6020B	649562
92561637003	B-113D	EPA 3005A	649484	EPA 6020B	649562
92561637004	EB-6	EPA 3005A	649484	EPA 6020B	649562
92561637001	B-105D	EPA 7470A	649668	EPA 7470A	649676
92561637002	B-112D	EPA 7470A	649668	EPA 7470A	649676
92561637003	B-113D	EPA 7470A	649668	EPA 7470A	649676
92561637004	EB-6	EPA 7470A	649668	EPA 7470A	649676
92561637001	B-105D	SM 2540C-2011	648470		
92561637002	B-112D	SM 2540C-2011	649122		
92561637003	B-113D	SM 2540C-2011	649122		
92561637004	EB-6	SM 2540C-2011	649122		
92561637001	B-105D	EPA 300.0 Rev 2.1 1993	647979		
92561637002	B-112D	EPA 300.0 Rev 2.1 1993	648429		
92561637003	B-113D	EPA 300.0 Rev 2.1 1993	648429		
92561637004	EB-6	EPA 300.0 Rev 2.1 1993	648429		

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Document Name:
Sample Condition Upon Receipt (SCUR)
 Document No.:
F-CAR-CI-033-Rev.07

Document Revised: October 28, 2020
 Page 1 of 2
 Issuing Authority:
 Pace Carolinas Quality Office

Laboratory receiving samples:

Ashville Eden Greenwood Huntersville Raleigh Mechanicsville Atlanta Kernersville

Sample Condition Upon Receipt

Client Name: Georgia Power

Project #: **WO#: 92561637**

Courier: Commercial Fed Ex UPS USPS Client Pace Other: _____



Custody Seal Present? Yes No Seals Intact? Yes No

Date/Initials Person Examining Contents: MT 9/16/21

Packing Material: Bubble Wrap Bubble Bags None Other

Biological Tissue Frozen? Yes No N/A

Thermometer: IR Gun ID: 214 Type of Ice: Wet Blue None

Cooler Temp: 3.2 Correction Factor: Add/Subtract (°C) +0.1

Temp should be above freezing to 6°C
 Samples out of temp criteria. Samples on ice, cooling process has begun

Cooler Temp Corrected (°C): 3.1

USDA Regulated Soil (N/A, water sample)

Did samples originate in a quarantine zone within the United States: CA, NY, or SC (check maps)? Yes No

Did samples originate from a foreign source (internationally, including Hawaii and Puerto Rico)? Yes No

			Comments/Discrepancy:
Chain of Custody Present?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	1.	
Samples Arrived within Hold Time?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	2.	
Short Hold Time Analysis (<72 hr.)?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	3.	
Rush Turn Around Time Requested?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	4.	
Sufficient Volume?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	5.	
Correct Containers Used?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	6.	
Pace Containers Used?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A		
Containers Intact?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	7.	
Dissolved analysis: Samples Field Filtered?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	8.	
Sample Labels Match COC?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	9.	
Includes Date/Time/ID/Analysis Matrix: <u>WT</u>			
Headspace in VOA Vials (>5-6mm)?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	10.	
Trip Blank Present?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	11.	
Trip Blank Custody Seals Present?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A		

COMMENTS/SAMPLE DISCREPANCY

Field Data Required? Yes No

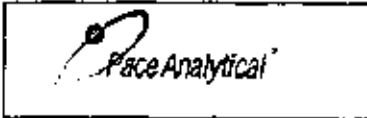
Lot ID of split containers:

CLIENT NOTIFICATION/RESOLUTION

Person contacted: _____ Date/Time: _____

Project Manager SCURF Review: _____ Date: _____

Project Manager SRF Review: _____ Date: _____



Document Name:
Sample Condition Upon Receipt (SCUR)
Document No.:
F-CAR-CS-033-Rev.07

Document Revised: October 28, 2020
Page 2 of 2
Issuing Authority:
Pace Carolinas Quality Office

*Check mark top half of box if pH and/or dechlorination is verified and within the acceptance range for preservation samples.

Exceptions: VOA, Coliform, TDC, Oil and Grease, DRO/BOIS (water) DOC, LLeHg

**Bottom half of box is to list number of bottles

Project #

WO#: 92561637

PM: NMG

Due Date: 09/30/21

CLIENT: GR-GA Power

Item #	BP4U-125 mL Plastic Unpreserved (N/A) (Cl-)	BP3U-250 mL Plastic Unpreserved (N/A)	BP2U-500 mL Plastic Unpreserved (N/A)	BP1U-1 liter Plastic Unpreserved (N/A)	BP4S-125 mL Plastic H2SO4 (pH < 2) (Cl-)	BP3M-250 mL plastic HNO3 (pH < 2)	BP4Z-125 mL Plastic 2N Acetate & NaOH (p>9)	BP4C-125 mL Plastic NaOH (pH > 12) (Cl-)	WGRU-Wide-mouthed Glass jar Unpreserved	AG1U-1 liter Amber Unpreserved (N/A) (Cl-)	AG1H-1 liter Amber HCl (pH < 2)	AG3U-250 mL Amber Unpreserved (N/A) (Cl-)	AG1S-1 liter Amber H2SO4 (pH < 2)	AG3S-250 mL Amber H2SO4 (pH < 2)	AG3A/AG3M-250 mL Amber NH4Cl (N/A)(Cl-)	OG9H-40 mL VOA HCl (N/A)	Y69T-40 mL VOA Na2S2O3 (N/A)	Y69U-40 mL VOA Unp (N/A)	OG9P-40 mL VOA H3PO4 (N/A)	VOAK (5 vials per kit) VPH/Gas kit (N/A)	V/GK (3 vials per kit) VPH/Gas kit (N/A)	SPST-125 mL Sterile Plastic (N/A - lab)	SPST-250 mL Sterile Plastic (N/A - lab)	BP3A-250 mL Plastic (NH2)2SO4 (9.3-9.7)	AG0U-100 mL Amber Unpreserved vials (N/A)	Y69U-20 mL Scintillation vials (N/A)	OG9U-40 mL Amber Unpreserved vials (N/A)		
1																													
2																													
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12																													

pH Adjustment Log for Preserved Samples

Sample ID	Type of Preservative	pH upon receipt	Date preservation adjusted	Time preservation adjusted	Amount of Preservative added	Lot #

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. Out of hold, incorrect preservative, out of temp, incorrect containers).

Laboratory receiving samples:

Asheville Eden Greenwood Huntersville Raleigh Mechanicsville Atlanta Kernersville

Sample Condition Upon Receipt Courier: <input type="checkbox"/> Commercial <input type="checkbox"/> Fed Ex <input type="checkbox"/> Pace <input type="checkbox"/> UPS <input type="checkbox"/> USPS <input type="checkbox"/> Other: _____ <input checked="" type="checkbox"/> Client	Client Name: <u>G A Power</u>	Project #: <div style="border: 1px solid black; height: 40px; width: 100%;"></div>
--	----------------------------------	---

Custody Seal Present? Yes No Seals Intact? Yes No

Packing Material: Bubble Wrap Bubble Bags None Other _____

Thermometer: IR Gun ID: 083 Type of Ice: Wet Blue None

Cooler Temp: 2.0 Correction Factor: Add/Subtract (°C) 0.0 Temp should be above freezing to 6°C

Cooler Temp Corrected (°C): 2.0 Samples out of temp criteria. Samples on ice, cooling process has begun

USDA Regulated Soil (N/A, water sample)

Did samples originate in a quarantine zone within the United States: CA, NY, or SC (check maps)? Yes No

Did samples originate from a foreign source (internationally, including Hawaii and Puerto Rico)? Yes No

Chain of Custody Present?	Yes	No	N/A	Comments/Discrepancy:
Chain of Custody Present?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1.
Samples Arrived within Hold Time?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2.
Short Hold Time Analysis (<72 hr.)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	3.
Rush Turn Around Time Requested?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	4.
Sufficient Volume?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	5.
Correct Containers Used?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	6.
-Pace Containers Used?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Containers Intact?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	7.
Dissolved analysis: Samples Field Filtered?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	8.
Sample Labels Match COC?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	9.
Includes Date/Time/ID/Analysis Matrix: <u>W</u>				
Headspace in VOA Vials (>5-6mm)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	10.
Trip Blank Present?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	11.
Trip Blank Custody Seals Present?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	

COMMENTS/SAMPLE DISCREPANCY _____ Field Data Required? Yes No

Lot ID of split containers: _____

CLIENT NOTIFICATION/RESOLUTION _____

Person contacted: _____ Date/Time: _____

Project Manager SCURF Review: _____ Date: _____

Project Manager SRF Review: _____ Date: _____



Document Name:
 Sample Condition Upon Receipt (SCUR)
 Document No.:
 F-CAR-CS-033-Rev.07

Document Revised: October 28, 2020
 Page 2 of 2
 Issuing Authority:
 Pace Carolina's Quality Office

*Check mark top half of box if pH and/or dechlorination is verified and within the acceptance range for preservation samples.

Exceptions: VOA, Coliform, TOC, Oil and Grease, DRG/BO15 (water) DOC, UHg

**Bottom half of box is to list number of bottles

Project #

Item #	Description	1	2	3	4	5	6	7	8	9	10	11	12
BP40-125 ml Plastic Unpreserved (N/A) (C-)		/	/	/	/	/	/	/	/	/	/	/	/
BP90-250 ml Plastic Unpreserved (N/A)		/	/	/	/	/	/	/	/	/	/	/	/
BP10-500 ml Plastic Unpreserved (N/A)		/	/	/	/	/	/	/	/	/	/	/	/
BP10-1 liter Plastic Unpreserved (N/A)		/	/	/	/	/	/	/	/	/	/	/	/
BP45-125 ml Plastic H2SO4 (pH < 2) (C-)		/	/	/	/	/	/	/	/	/	/	/	/
BP30-250 ml plastic HNO3 (pH < 2)		/	/	/	/	/	/	/	/	/	/	/	/
BP42-125 ml Plastic Zn Acetate & NaOH (D-9)		/	/	/	/	/	/	/	/	/	/	/	/
BP40-125 ml Plastic NaOH (pH > 12) (C-)		/	/	/	/	/	/	/	/	/	/	/	/
WGFW-Wide-mouthed Glass jar Unpreserved		/	/	/	/	/	/	/	/	/	/	/	/
AG10-1 liter Amber Unpreserved (N/A) (C-)		/	/	/	/	/	/	/	/	/	/	/	/
AG10-1 liter Amber HCl (pH < 2)		/	/	/	/	/	/	/	/	/	/	/	/
AG30-250 ml Amber Unpreserved (N/A) (C-)		/	/	/	/	/	/	/	/	/	/	/	/
AG15-1 liter Amber H2SO4 (pH < 2)		/	/	/	/	/	/	/	/	/	/	/	/
AG50-250 ml Amber H2SO4 (pH < 2)		/	/	/	/	/	/	/	/	/	/	/	/
AG10-1 liter Amber H2SO4 (N/A/HCl-)		/	/	/	/	/	/	/	/	/	/	/	/
DG9H-40 ml VOA HCl (N/A)		/	/	/	/	/	/	/	/	/	/	/	/
VG9T-40 ml VOA Na2S2O3 (N/A)		/	/	/	/	/	/	/	/	/	/	/	/
VG9U-40 ml VOA Urp (N/A)		/	/	/	/	/	/	/	/	/	/	/	/
DG9P-40 ml VOA H3PO4 (N/A)		/	/	/	/	/	/	/	/	/	/	/	/
VOAK (6 vials per kit)-S035 kit (N/A)		/	/	/	/	/	/	/	/	/	/	/	/
V/GK (3 vials per kit)-VPH/Gas kit (N/A)		/	/	/	/	/	/	/	/	/	/	/	/
SP3T-125 ml Sterile Plastic (N/A - lab)		/	/	/	/	/	/	/	/	/	/	/	/
SP2T-250 ml Sterile Plastic (N/A - lab)		/	/	/	/	/	/	/	/	/	/	/	/
BPAA-250 ml Plastic (NH2)2SO4 (9.3-9.7)		/	/	/	/	/	/	/	/	/	/	/	/
AG00-100 ml Amber Unpreserved vials (N/A)		/	/	/	/	/	/	/	/	/	/	/	/
VS00-20 ml Scintillation vials (N/A)		/	/	/	/	/	/	/	/	/	/	/	/
DG9U-40 ml Amber Unpreserved vials (N/A)		/	/	/	/	/	/	/	/	/	/	/	/

pH Adjustment Log for Preserved Samples

Sample ID	Type of Preservative	pH upon receipt	Date preservation adjusted	Time preservation adjusted	Amount of Preservative added	Lot #

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DENR Certification Office (i.e. Out of hold, incorrect preservative, out of temp, incorrect containers).

Resolving

CHAIN-OF-CUSTODY / Analytical Request Document
 This Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Section A Requested Client Information: **Company:** Georgia Power - Core Development Resources **Address:** 2400 Market Road Atlanta, GA 30338
 Section B Requested Sample Information: **Request ID:** JVA-AT-17-01 **Order To:** **Order To:** **Requested Date:** 09/17/21
 Section C Requested Analysis Information: **Analysis:** **Requested Name:** **Requested Date:** 09/17/21

ITEM #	SAMPLE ID	LABORATORY	DATE	TIME	ANALYSIS TEST	Y/N	Requested Analysis (Y/N)				RESIDUAL CHARGE (Y/N)
							Asp 116V Total Alkalis	C. F. 504 TDS	Radium 226/228		
1	B-112D	151	09/17/21	12:13	Asp 116V Total Alkalis	X	X	X	X		
2	B-112D	151	09/17/21	13:18	C. F. 504 TDS	X	X	X	X		
3	FBI	151	09/17/21	14:55	Radium 226/28	X	X	X	X		
4											
5											
6											
7											
8											
9											
10											
11											
12											
13											
14											

Additional Comments: **Requested By:** **Date:** 9-17-21 **Time:** 13:06
Requested Date: 9-17-21 **Time:** 13:06
Signature: **Date:** 9-17-21

October 29, 2021

Joju Abraham
Georgia Power-CCR
2480 Maner Road
Atlanta, GA 30339

RE: Project: MCDONOUGH AP-1 ASSESS RADS
Pace Project No.: 92561607

Dear Joju Abraham:

Enclosed are the analytical results for sample(s) received by the laboratory between September 16, 2021 and September 17, 2021. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

- Pace Analytical Services - Greensburg

If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Nicole D'Oleo
nicole.d'oleo@pacelabs.com
(704)875-9092
Project Manager

Enclosures

cc: Stephen Benda
Daniela Herrera, Golder
Ben Hodges, Georgia Power
Kristen Jurinko
J. Shelby Mobley
Charles Norton, Southern Company
Ms. Lauren Petty, Southern Company
Dawn Prell, Golder Associates Inc.
Tim Richards, Golder Associates - Atlanta



REPORT OF LABORATORY ANALYSIS

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CERTIFICATIONS

Project: MCDONOUGH AP-1 ASSESS RADS
Pace Project No.: 92561607

Pace Analytical Services Pennsylvania

1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601
ANAB DOD-ELAP Rad Accreditation #: L2417
Alabama Certification #: 41590
Arizona Certification #: AZ0734
Arkansas Certification
California Certification #: 04222CA
Colorado Certification #: PA01547
Connecticut Certification #: PH-0694
Delaware Certification
EPA Region 4 DW Rad
Florida/TNI Certification #: E87683
Georgia Certification #: C040
Florida: Cert E871149 SEKS WET
Guam Certification
Hawaii Certification
Idaho Certification
Illinois Certification
Indiana Certification
Iowa Certification #: 391
Kansas/TNI Certification #: E-10358
Kentucky Certification #: KY90133
KY WW Permit #: KY0098221
KY WW Permit #: KY0000221
Louisiana DHH/TNI Certification #: LA180012
Louisiana DEQ/TNI Certification #: 4086
Maine Certification #: 2017020
Maryland Certification #: 308
Massachusetts Certification #: M-PA1457
Michigan/PADEP Certification #: 9991

Missouri Certification #: 235
Montana Certification #: Cert0082
Nebraska Certification #: NE-OS-29-14
Nevada Certification #: PA014572018-1
New Hampshire/TNI Certification #: 297617
New Jersey/TNI Certification #: PA051
New Mexico Certification #: PA01457
New York/TNI Certification #: 10888
North Carolina Certification #: 42706
North Dakota Certification #: R-190
Ohio EPA Rad Approval: #41249
Oregon/TNI Certification #: PA200002-010
Pennsylvania/TNI Certification #: 65-00282
Puerto Rico Certification #: PA01457
Rhode Island Certification #: 65-00282
South Dakota Certification
Tennessee Certification #: 02867
Texas/TNI Certification #: T104704188-17-3
Utah/TNI Certification #: PA014572017-9
USDA Soil Permit #: P330-17-00091
Vermont Dept. of Health: ID# VT-0282
Virgin Island/PADEP Certification
Virginia/VELAP Certification #: 9526
Washington Certification #: C868
West Virginia DEP Certification #: 143
West Virginia DHHR Certification #: 9964C
Wisconsin Approve List for Rad
Wyoming Certification #: 8TMS-L

REPORT OF LABORATORY ANALYSIS

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SAMPLE SUMMARY

Project: MCDONOUGH AP-1 ASSESS RADS

Pace Project No.: 92561607

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92561607001	B-105D	Water	09/15/21 15:10	09/16/21 09:06
92561607002	B-112D	Water	09/16/21 12:13	09/17/21 17:06
92561607003	B-113D	Water	09/17/21 15:19	09/17/21 17:06
92561607004	EB-6	Water	09/17/21 14:55	09/17/21 17:06

REPORT OF LABORATORY ANALYSIS

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SAMPLE ANALYTE COUNT

Project: MCDONOUGH AP-1 ASSESS RADS

Pace Project No.: 92561607

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
92561607001	B-105D	EPA 9315	CLA	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92561607002	B-112D	EPA 9315	JJY	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92561607003	B-113D	EPA 9315	JJY	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92561607004	EB-6	EPA 9315	JJY	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA

PASI-PA = Pace Analytical Services - Greensburg

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: MCDONOUGH AP-1 ASSESS RADS

Pace Project No.: 92561607

Sample: B-105D **Lab ID: 92561607001** Collected: 09/15/21 15:10 Received: 09/16/21 09:06 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	0.392 ± 0.242 (0.368) C:97% T:NA	pCi/L	10/07/21 08:31	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	1.62 ± 0.566 (0.774) C:59% T:84%	pCi/L	10/06/21 11:15	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	2.01 ± 0.808 (1.14)	pCi/L	10/07/21 15:41	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: MCDONOUGH AP-1 ASSESS RADS

Pace Project No.: 92561607

Sample: B-112D **Lab ID: 92561607002** Collected: 09/16/21 12:13 Received: 09/17/21 17:06 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	0.241 ± 0.169 (0.299) C:94% T:NA	pCi/L	10/19/21 08:57	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	-0.180 ± 0.383 (0.918) C:74% T:86%	pCi/L	10/14/21 11:15	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	0.241 ± 0.552 (1.22)	pCi/L	10/20/21 17:24	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: MCDONOUGH AP-1 ASSESS RADS

Pace Project No.: 92561607

Sample: B-113D **Lab ID: 92561607003** Collected: 09/17/21 15:19 Received: 09/17/21 17:06 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	0.280 ± 0.202 (0.381) C:94% T:NA	pCi/L	10/19/21 08:57	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	0.803 ± 0.446 (0.815) C:77% T:83%	pCi/L	10/14/21 11:15	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	1.08 ± 0.648 (1.20)	pCi/L	10/20/21 17:24	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: MCDONOUGH AP-1 ASSESS RADS

Pace Project No.: 92561607

Sample: EB-6 **Lab ID: 92561607004** Collected: 09/17/21 14:55 Received: 09/17/21 17:06 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	-0.0114 ± 0.175 (0.445) C:95% T:NA	pCi/L	10/19/21 08:57	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	0.975 ± 0.467 (0.818) C:78% T:88%	pCi/L	10/14/21 11:15	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	0.975 ± 0.642 (1.26)	pCi/L	10/20/21 17:24	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL - RADIOCHEMISTRY

Project: MCDONOUGH AP-1 ASSESS RADS

Pace Project No.: 92561607

QC Batch: 467255

Analysis Method: EPA 9320

QC Batch Method: EPA 9320

Analysis Description: 9320 Radium 228

Laboratory: Pace Analytical Services - Greensburg

Associated Lab Samples: 92561607002, 92561607003, 92561607004

METHOD BLANK: 2256295

Matrix: Water

Associated Lab Samples: 92561607002, 92561607003, 92561607004

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	-0.151 ± 0.301 (0.746) C:75% T:86%	pCi/L	10/14/21 11:15	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL - RADIOCHEMISTRY

Project: MCDONOUGH AP-1 ASSESS RADS

Pace Project No.: 92561607

QC Batch:	466957	Analysis Method:	EPA 9315
QC Batch Method:	EPA 9315	Analysis Description:	9315 Total Radium
		Laboratory:	Pace Analytical Services - Greensburg

Associated Lab Samples: 92561607002, 92561607003, 92561607004

METHOD BLANK: 2255015 Matrix: Water

Associated Lab Samples: 92561607002, 92561607003, 92561607004

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	0.0260 ± 0.142 (0.353) C:102% T:NA	pCi/L	10/19/21 08:55	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL - RADIOCHEMISTRY

Project: MCDONOUGH AP-1 ASSESS RADS

Pace Project No.: 92561607

QC Batch: 465348

Analysis Method: EPA 9320

QC Batch Method: EPA 9320

Analysis Description: 9320 Radium 228

Laboratory: Pace Analytical Services - Greensburg

Associated Lab Samples: 92561607001

METHOD BLANK: 2247079

Matrix: Water

Associated Lab Samples: 92561607001

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.625 ± 0.317 (0.544) C:74% T:91%	pCi/L	10/06/21 11:18	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL - RADIOCHEMISTRY

Project: MCDONOUGH AP-1 ASSESS RADS

Pace Project No.: 92561607

QC Batch: 465350

Analysis Method: EPA 9315

QC Batch Method: EPA 9315

Analysis Description: 9315 Total Radium

Laboratory: Pace Analytical Services - Greensburg

Associated Lab Samples: 92561607001

METHOD BLANK: 2247083

Matrix: Water

Associated Lab Samples: 92561607001

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	0.0502 ± 0.146 (0.360) C:88% T:NA	pCi/L	10/07/21 08:30	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

QUALIFIERS

Project: MCDONOUGH AP-1 ASSESS RADS
Pace Project No.: 92561607

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

Acid preservation may not be appropriate for 2 Chloroethylvinyl ether.

A separate vial preserved to a pH of 4-5 is recommended in SW846 Chapter 4 for the analysis of Acrolein and Acrylonitrile by EPA Method 8260.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Reported results are not rounded until the final step prior to reporting. Therefore, calculated parameters that are typically reported as "Total" may vary slightly from the sum of the reported component parameters.

Act - Activity

Unc - Uncertainty: SDWA = 1.96 sigma count uncertainty, all other matrices = Expanded Uncertainty (95% confidence interval).

Gamma Spec = Expanded Uncertainty (95.4% Confidence Interval)

(MDC) - Minimum Detectable Concentration

Trac - Tracer Recovery (%)

Carr - Carrier Recovery (%)

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: MCDONOUGH AP-1 ASSESS RADS

Pace Project No.: 92561607

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92561607001	B-105D	EPA 9315	465350		
92561607002	B-112D	EPA 9315	466957		
92561607003	B-113D	EPA 9315	466957		
92561607004	EB-6	EPA 9315	466957		
92561607001	B-105D	EPA 9320	465348		
92561607002	B-112D	EPA 9320	467255		
92561607003	B-113D	EPA 9320	467255		
92561607004	EB-6	EPA 9320	467255		
92561607001	B-105D	Total Radium Calculation	467224		
92561607002	B-112D	Total Radium Calculation	469112		
92561607003	B-113D	Total Radium Calculation	469112		
92561607004	EB-6	Total Radium Calculation	469112		

REPORT OF LABORATORY ANALYSIS

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Laboratory receiving samples:

Asheville Eden Greenwood Huntersville Raleigh Mechanicsville Atlanta Kernersville

Sample Condition Upon Receipt

Client Name: Georgia Power

Project #: **WO# : 92561607**

 92561607

Courier: Commercial Fed Ex UPS USPS Client Other: _____

Custody Seal Present? Yes No Seals Intact? Yes No

Date/Initials Person Examining Contents: MT 9/16/21

Packing Material: Bubble Wrap Bubble Bags None Other

Biological Tissue Frozen? Yes No N/A

Thermometer: IR Gun ID: 214 Type of Ice: Wet Blue None

Cooler Temp: 3.2 Correction Factor: Add/Subtract (°C) +0.1

Temp should be above freezing to 6°C
 Samples out of temp criteria. Samples on ice, cooling process has begun

Cooler Temp Corrected (°C): 3.1

USDA Regulated Soil (N/A, water samp'e)

Did samples originate in a quarantine zone within the United States: CA, NY, or SC (check maps)? Yes No

Did samples originate from a foreign source (internationally, including Hawaii and Puerto Rico)? Yes No

			Comments/Discrepancy:
Chain of Custody Present?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	1.	
Samples Arrived within Hold Time?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	2.	
Short Hold Time Analysis (<72 hr.)?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	3.	
Rush Turn Around Time Requested?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	4.	
Sufficient Volume?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	5.	
Correct Containers Used?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	6.	
-Pace Containers Used?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A		
Containers Intact?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	7.	
Dissolved analysis: Samples Field Filtered?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	8.	
Sample Labels Match COC?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	9.	
-Includes Date/Time/ID/Analysis Matrix: <u>WT</u>			
Headspace in VOA Vials (>5-6mm)?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	10.	
Trip Blank Present?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	11.	
Trip Blank Custody Seals Present?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A		

COMMENTS/SAMPLE DISCREPANCY Field Data Required? Yes No

Lot ID of split containers: _____

CLIENT NOTIFICATION/RESOLUTION

Person contacted: _____ Date/Time: _____

Project Manager SCURF Review: _____ Date: _____

Project Manager SRF Review: _____ Date: _____



Document Name:
Sample Condition Upon Receipt(SCUR)
 Document No.:
F-CAR-CS-033-Rev.07

Document Revised: October 28, 2020
 Page 2 of 2
 Issuing Authority:
 Pace Carolinas Quality Office

*Check mark top half of box if pH and/or dechlorination is verified and within the acceptance range for preservation samples.

Exceptions: VOA, Coliform, TOC, Oil and Grease, DRO/8015 (water) DOC, LLHg

**Bottom half of box is to list number of bottles

Project #

W0# : 92561607

PM: NMG

Due Date: 10/07/21

CLIENT: GR-GR Power

Item#	BP4U-125 mL Plastic Unpreserved (N/A) (Cl-)	BP3U-250 mL Plastic Unpreserved (N/A)	BP2U-500 mL Plastic Unpreserved (N/A)	BP1U-1 liter Plastic Unpreserved (N/A)	BP4S-125 mL Plastic H2SO4 (pH < 2) (Cl-)	BP3N-250 mL plastic HNO3 (pH < 2)	BP4Z-125 mL Plastic ZN Acetate & NaOH (>9)	BP4C-125 mL Plastic NaOH (pH > 12) (Cl-)	WGFU-Wide-mouthed Glass jar Unpreserved	AG1U-1 liter Amber Unpreserved (N/A) (Cl-)	AG1H-1 liter Amber HCl (pH < 2)	AG3U-250 mL Amber Unpreserved (N/A) (Cl-)	AG1S-1 liter Amber H2SO4 (pH < 2)	AG3S-250 mL Amber H2SO4 (pH < 2)	AG3A(DG3A)-250 mL Amber NH4Cl (N/A)(Cl-)	DG9H-40 mL VOA HCl (N/A)	VG9T-40 mL VOA Na2S2O3 (N/A)	VG9U-40 mL VOA Unp (N/A)	DG9P-40 mL VOA H3PO4 (N/A)	VOAK (6 vials per kit)-5035 kit (N/A)	V/GK (3 vials per kit)-VPH/Gas kit (N/A)	SP5T-125 mL Sterile Plastic (N/A - lab)	SP2T-250 mL Sterile Plastic (N/A - lab)	BP3A-250 mL Plastic (NH2)2SO4 (9.3-9.7)	AG0U-100 mL Amber Unpreserved vials (N/A)	V5GU-20 mL Scintillation vials (N/A)	DG9U-40 mL Amber Unpreserved vials (N/A)		
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pH Adjustment Log for Preserved Samples

Sample ID	Type of Preservative	pH upon receipt	Date preservation adjusted	Time preservation adjusted	Amount of Preservative added	Lot #

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. Out of hold, incorrect preservative, out of temp, incorrect containers.



Document Name:
Sample Condition Upon Receipt(SCUR)
Document No.:
F-CAR-CS-033-Rev.07

Document Revised: October 28, 2020
Page 1 of 2
Issuing Authority:
Pace Carolinas Quality Office

Laboratory receiving samples:

Asheville Eden Greenwood Huntersville Raleigh Mechanicsville Atlanta Kernersville

Sample Condition Upon Receipt

Client Name: G A Power

Project #:

Courier: Fed Ex UPS USPS Client
 Commercial Pace Other: _____

Custody Seal Present? Yes No Seals Intact? Yes No

Date/Initials Person Examining Contents: 9/17/20
COF

Packing Material: Bubble Wrap Bubble Bags None Other

Biological Tissue Frozen? Yes No N/A

Thermometer: IR Gun ID: 083 Type of Ice: Wet Blue None

Cooler Temp: 2.0 Correction Factor: Add/Subtract (°C) 0.0

Temp should be above freezing to 6°C
 Samples out of temp criteria. Samples on ice, cooling process has begun

Cooler Temp Corrected (°C): 2.0

USDA Regulated Soil (N/A, water sample)

Did samples originate in a quarantine zone within the United States: CA, NY, or SC (check maps)? Yes No

Did samples originate from a foreign source (internationally, including Hawaii and Puerto Rico)? Yes No

			Comments/Discrepancy:
Chain of Custody Present?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A		1.
Samples Arrived within Hold Time?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A		2.
Short Hold Time Analysis (<72 hr.)?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A		3.
Rush Turn Around Time Requested?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A		4.
Sufficient Volume?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A		5.
Correct Containers Used?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A		6.
-Pace Containers Used?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A		
Containers Intact?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A		7.
Dissolved analysis: Samples Field Filtered?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A		8.
Sample Labels Match COC?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A		9.
-Includes Date/Time/ID/Analysis Matrix:	<u>W</u>		
Headspace in VOA Vials (>5-6mm)?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A		10.
Trip Blank Present?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A		11.
Trip Blank Custody Seals Present?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A		

COMMENTS/SAMPLE DISCREPANCY

Field Data Required? Yes No

Lot ID of split containers:

CLIENT NOTIFICATION/RESOLUTION

Person contacted: _____ Date/Time: _____

Project Manager SCURF Review: _____ Date: _____

Project Manager SRF Review: _____ Date: _____



Document Name:
Sample Condition Upon Receipt(SCUR)
 Document No.:
F-CAR-CS-033-Rev.07

Document Revised: October 28, 2020
 Page 2 of 2
 Issuing Authority:
 Pace Carolinas Quality Office

*Check mark top half of box if pH and/or dechlorination is verified and within the acceptance range for preservation samples.

Exceptions: VOA, Coliform, TOC, Oil and Grease, DRO/8015 (water) DOC, LLHg

**Bottom half of box is to list number of bottles

Project #

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Item#	BP4U-125 mL Plastic Unpreserved (N/A) (Cl-)	BP3U-250 mL Plastic Unpreserved (N/A)	BP2U-500 mL Plastic Unpreserved (N/A)	BP1U-1 liter Plastic Unpreserved (N/A)	BP4S-125 mL Plastic H2SO4 (pH < 2) (Cl-)	BP3N-250 mL plastic HNO3 (pH < 2)	BP4Z-125 mL Plastic ZN Acetate & NaOH (>9)	BP4C-125 mL Plastic NaOH (pH > 12) (Cl-)	WGFU-Wide-mouthed Glass Jar Unpreserved	AG1U-1 liter Amber Unpreserved (N/A) (Cl-)	AG1H-1 liter Amber HCl (pH < 2)	AG3U-250 mL Amber Unpreserved (N/A) (Cl-)	AG1S-1 liter Amber H2SO4 (pH < 2)	AG3S-250 mL Amber H2SO4 (pH < 2)	AG3A(DG3A)-250 mL Amber NH4Cl (N/A)(Cl-)	DG9H-40 mL VOA HCl (N/A)	VG9T-40 mL VOA Na2S2O3 (N/A)	VG9U-40 mL VOA Unp (N/A)	DG9P-40 mL VOA H3PO4 (N/A)	VOAK (6 vials per kit)-5035 kit (N/A)	V/GK (3 vials per kit)-VPH/Gas kit (N/A)	SP5T-125 mL Sterile Plastic (N/A - lab)	SP2T-250 mL Sterile Plastic (N/A - lab)	BP3A-250 mL Plastic (NH2)2SO4 (9.3-9.7)	AG0U-100 mL Amber Unpreserved vials (N/A)	VSGU-20 mL Scintillation vials (N/A)	DG9U-40 mL Amber Unpreserved vials (N/A)		
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pH Adjustment Log for Preserved Samples

Sample ID	Type of Preservative	pH upon receipt	Date preservation adjusted	Time preservation adjusted	Amount of Preservative added	Lot #

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. Out of hold, incorrect preservative, out of temp, incorrect containers.



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*Check mark top half of box if pH and/or dechlorination is verified and within the acceptance range for preservation samples.

Exceptions: VOA, Coliform, TOC, Oil and Grease, DRO/8015 (water) DOC, LLHg

**Bottom half of box is to list number of bottles

Project #

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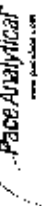
Item#	BP4U-125 mL Plastic Unpreserved (N/A) (Cl-)	BP3U-250 mL Plastic Unpreserved (N/A)	BP2U-500 mL Plastic Unpreserved (N/A)	BP1U-1 liter Plastic Unpreserved (N/A)	BP4S-125 mL Plastic H2SO4 (pH < 2) (Cl-)	BP3N-250 mL plastic HNO3 (pH < 2)	BP4Z-125 mL Plastic ZN Acetate & NaOH (>9)	BP4C-125 mL Plastic NaOH (pH > 12) (Cl-)	WGFU-Wide-mouthed Glass jar Unpreserved	AG1U-1 liter Amber Unpreserved (N/A) (Cl-)	AG1H-1 liter Amber HCl (pH < 2)	AG3U-250 mL Amber Unpreserved (N/A) (Cl-)	AG1S-1 liter Amber H2SO4 (pH < 2)	AG3S-250 mL Amber H2SO4 (pH < 2)	AG3A[DG3A]-250 mL Amber NH4Cl (N/A)(Cl-)	DG9H-40 mL VOA HCl (N/A)	VG9T-40 mL VOA Na2S2O3 (N/A)	VG9U-40 mL VOA Unp (N/A)	DG9P-40 mL VOA H3PO4 (N/A)	VOAK (6 vials per kit)-5035 kit (N/A)	V/GK (3 vials per kit)-VPH/Gas kit (N/A)	SP5T-125 mL Sterile Plastic (N/A - lab)	SP2T-250 mL Sterile Plastic (N/A - lab)	BP3A-250 mL Plastic (NH2)2SO4 (9.3-9.7)	AG0U-100 mL Amber Unpreserved vials (N/A)	V5GU-20 mL Scintillation vials (N/A)	DG9U-40 mL Amber Unpreserved vials (N/A)
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11	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
12	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/

pH Adjustment Log for Preserved Samples

Sample ID	Type of Preservative	pH upon receipt	Date preservation adjusted	Time preservation adjusted	Amount of Preservative added	Lot #

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. Out of hold, incorrect preservative, out of temp, incorrect containers.

Quality Control Sample Performance Assessment



Analyst Must Manually Enter All Fields Highlighted in Yellow.

Test: Ra-228
 Analyst: VAL
 Date: 10/1/2021
 Worksheet: 62852
 Matrix: WT

Method Blank Assessment	
MB Sample ID	224-1079
MB Concentration	0.625
MB 2 Sigma CSU	0.317
MB MDIC	0.544
MB Numerical Performance Indicator	3.06
MB Status vs Numerical Indicator:	Fail*
MB Status vs MDIC:	See Comment

Laboratory Control Sample Assessment	
ICSD (Y or N)?	Y
LCSD#2852	10/6/2021
LCSD#2852	10/6/2021
Count Date:	21-029
Spike ID:	37-949
Decay Corrected Spike Concentration (pCi/ml):	0.20
Volume Used (mL):	0.809
Aliquot Volume (L, g, F):	9.379
Target Conc (pCi/L, g, F):	0.460
Uncertainty (Calculated):	8.389
Result (pCi/L, g, F):	1.704
LCSD#2 Sigma CSU (pCi/L, g, F):	-1.07
Numerical Performance Indicator:	89.73%
Status vs Numerical Indicator:	Pass
Upper % Recovery Limits:	135%
Lower % Recovery Limits:	60%

Duplicate Sample Assessment	
Sample ID:	LC562852
Duplicate Sample ID:	LCSD62852
Sample Result (pCi/L, g, F):	8.389
Sample Result 2 Sigma CSU (pCi/L, g, F):	1.704
Sample Duplicate Result (pCi/L, g, F):	7.162
Sample Duplicate Result 2 Sigma CSU (pCi/L, g, F):	1.451
Are sample and/or duplicate results below HL?	NO
Duplicate Numerical Performance Indicator:	1.075
(Based on the LCSD CSU Percent Recoveries) Duplicate RPD:	16.10%
Duplicate Status vs Numerical Indicator:	Pass
Duplicate Status vs RPD:	Pass
% RPD Limit:	36%

Sample Matrix Spike Control Assessment		MS/MSD 1	MS/MSD 2
Sample Collection Date:	Sample I.D.		
Sample Volume Used in MS (ml):	Sample MS ID		
Spike Volume Used in MSD (ml):	Sample MSD ID		
MS Aliquot (L, g, F):	Spike I.D.		
MS Target Conc (pCi/L, g, F):	MS/MSD Decay Corrected Spike Concentration (pCi/ml):		
MSD Aliquot (L, g, F):	Spike Volume Used in MS (ml):		
MSD Target Conc (pCi/L, g, F):	Spike Volume Used in MSD (ml):		
MS Spike Uncertainty (Calculated):	MS Aliquot (L, g, F):		
MSD Spike Uncertainty (Calculated):	MS Target Conc (pCi/L, g, F):		
Sample Result:	MSD Aliquot (L, g, F):		
Sample Matrix Spike Result:	MSD Target Conc (pCi/L, g, F):		
Sample Matrix Spike Duplicate Result:	MS Spike Uncertainty (Calculated):		
Matrix Spike Duplicate Result 2 Sigma CSU (pCi/L, g, F):	MSD Spike Uncertainty (Calculated):		
MS Numerical Performance Indicator:	Sample Result:		
MSD Numerical Performance Indicator:	Sample Result 2 Sigma CSU (pCi/L, g, F):		
MS Percent Recovery:	Matrix Spike Result:		
MSD Percent Recovery:	Matrix Spike Duplicate Result:		
MS Status vs Numerical Indicator:	MS Numerical Performance Indicator:		
MSD Status vs Numerical Indicator:	MSD Numerical Performance Indicator:		
MS/MSD Upper % Recovery Limits:	MS Percent Recovery:		
MS/MSD Lower % Recovery Limits:	MSD Percent Recovery:		

Matrix Spike/Matrix Spike Duplicate Sample Assessment	
Sample I.D.	Sample MS ID
Sample MS ID	Sample MSD ID
Matrix Spike Result 2 Sigma CSU (pCi/L, g, F):	Matrix Spike Result 2 Sigma CSU (pCi/L, g, F):
Sample Matrix Spike Duplicate Result:	Sample Matrix Spike Duplicate Result:
Duplicate Numerical Performance Indicator:	Duplicate Numerical Performance Indicator:
(Based on the Percent Recoveries) MS/MSD Duplicate RPD:	(Based on the Percent Recoveries) MS/MSD Duplicate RPD:
MS/MSD Duplicate Status vs Numerical Indicator:	MS/MSD Duplicate Status vs Numerical Indicator:
MS/MSD Duplicate Status vs RPD:	MS/MSD Duplicate Status vs RPD:
% RPD Limit:	% RPD Limit:

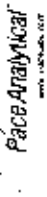
* Evaluation of duplicate precision is not applicable if either the sample or duplicate results are below the MDIC.

Comments:

*The method blank result is below the reporting limit for this analysis and is acceptable

Handwritten note: 10/1/2021

Quality Control Sample Performance Assessment



Analyst Must Manually Enter All Fields Highlighted in Yellow.

Test: Ra-226
 Analyst: JULY
 Date: 10/14/2021
 Worksheet: 63017
 Matrix: DW

Method Blank Assessment

MB Sample ID	225015
MB Concentration	0.028
MB Counting Uncertainty	0.142
MB MDC	0.353
MB Numerical Performance Indicator	0.38
MB Status vs Numerical Indicator	N/A
MB Status vs MDC	Pass

Laboratory Control Sample Assessment

LCSID (Y or N)?	Y
LCS63017	LCS063017
Count Date	10/19/2021
Spike ID:	19-033
Decay Corrected Spike Concentration (pCi/mL):	24.033
Volume Used (mL):	0.10
Aliquot Volume (L, g, F):	0.503
Target Conc. (pCi/L, g, F):	4.780
Uncertainty (Calculated):	0.057
Result (pCi/L, g, F):	5.814
LCS/LCSD Counting Uncertainty (pCi/L, g, F):	0.601
Numerical Performance Indicator:	3.38
Percent Recovery	121.64%
Status vs Numerical Indicator:	N/A
Status vs Recovery	Pass
Upper % Recovery Limit:	125%
Lower % Recovery Limit:	75%

Duplicate Sample Assessment

Sample ID	Duplicate Sample ID
LCS63017	LCS063017
Sample Result (pCi/L, g, F):	5.814
Sample Duplicate Result (pCi/L, g, F):	0.601
Sample Duplicate Counting Uncertainty (pCi/L, g, F):	5.134
Sample Duplicate Result Counting Uncertainty (pCi/L, g, F):	0.72
Are sample and/or duplicate results below RL?	NO
Duplicate Numerical Performance Indicator:	1.607
Duplicate Percent Recoveries:	12.68%
Duplicate Status vs Numerical Indicator:	N/A
Duplicate Status vs RPD:	Pass
% RPD Limit:	25%

Evaluation of duplicate precision is not applicable if either the sample or duplicate results are below the MDC.

Comments:

10/14/2021

Sample Matrix Spike Control Assessment

Sample Collection Date	Sample ID	MSMSD 1	MSMSD 2
Sample MS ID	Sample MS ID		
Spike I.D.	Spike I.D.		
MSMSD Decay Corrected Spike Concentration (pCi/mL)	Spike Volume Used in MS (mL)		
MS Aliquot (L, g, F)	MS Target Conc. (pCi/L, g, F)		
MS Target Conc. (pCi/L, g, F)	MSD Aliquot (L, g, F)		
MS Spike Uncertainty (Calculated)	MS Target Conc. (pCi/L, g, F)		
MSD Spike Uncertainty (Calculated)	MS Spike Uncertainty (Calculated)		
Sample Result Counting Uncertainty (pCi/L, g, F)	Sample Result		
Sample Matrix Spike Result	Sample Matrix Spike Result		
Sample Matrix Spike Duplicate Result:	Sample Matrix Spike Duplicate Result:		
MS Numerical Performance Indicator:	MS Numerical Performance Indicator:		
MS Percent Recovery:	MS Percent Recovery:		
MS Status vs Numerical Indicator:	MS Status vs Numerical Indicator:		
MS Status vs Recovery:	MS Status vs Recovery:		
MS/MSD Upper % Recovery Limit:	MS/MSD Lower % Recovery Limit:		

Matrix Spike/Matrix Spike Duplicate Sample Assessment

Sample ID	Sample MS ID
Sample MS ID	Sample MS ID
Matrix Spike Result Counting Uncertainty (pCi/L, g, F)	Matrix Spike Result Counting Uncertainty (pCi/L, g, F)
Matrix Spike Duplicate Result Counting Uncertainty (pCi/L, g, F)	Matrix Spike Duplicate Result Counting Uncertainty (pCi/L, g, F)
Duplicate Numerical Performance Indicator:	Duplicate Numerical Performance Indicator:
MS/MSD Duplicate Status vs Numerical Indicator:	MS/MSD Duplicate Status vs RPD:
% RPD Limit:	% RPD Limit:

Quality Control Sample Performance Assessment

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Test Ra-228
Analyst VAL
Date 10/12/2021
Worklist 63069
Matrix WT



Method Blank Assessment	
MB Sample ID	2156295
MB concentration	-0.161
MB 2 Sigma CSU	0.301
MR MDC	0.746
MB Numerical Performance Indicator	-0.98
MB Status vs. Numerical Indicator	Pass
MB Status vs. MDC	Pass

Laboratory Control Sample Assessment	LCS# (Y or N)?	
	LCS#63069	LCS#63069
Count Date	10/14/2021	10/14/2021
Spike ID:	21-029	21-029
Decay Corrected Spike Concentration (pCi/mL)	37.849	37.849
Volume Used (mL)	0.10	0.10
Aliquot Volume (L, g, F)	0.807	0.821
Target Conc. (pCi/L, g, F)	4.691	4.612
Uncertainty (calculated)	0.230	0.226
Result (pCi/L, g, F)	4.670	4.581
LCS# CSD 2 Sigma CSU (pCi/L, g, F)	1.058	1.032
Numerical Performance Indicator	-0.04	-0.06
Percent Recovery	59.54%	58.33%
Status vs Numerical Indicator	N/A	N/A
Status vs Recovery	Pass	Pass
Upper % Recovery Limit:	135%	135%
Lower % Recovery Limit:	60%	60%

Duplicate Sample Assessment	LCS# (Y or N)?	
	LCS#63069	LCS#63069
Sample ID:	Enter Duplicate	Enter Duplicate
Duplicate Sample ID:	Sample #/s if other than LCS#CSD in the space below.	Sample #/s if other than LCS#CSD in the space below.
Sample Result 2 Sigma CSU (pCi/L, g, F)	4.670	4.670
Sample Duplicate Result (pCi/L, g, F)	1.658	1.658
Sample Duplicate Result 2 Sigma CSU (pCi/L, g, F)	4.581	4.581
Are sample matrix duplicate results below RL?	NO	NO
Cuplicate Numerical Performance Indicator:	0.117	0.117
Cuplicate Numerical Performance Indicator:	0.21%	0.21%
Duplicate Status vs Numerical Indicator:	Pass	Pass
Duplicate Status vs RPD:	Pass	Pass
% RPD Limit:	36%	36%

Evaluation of duplicate precision is not applicable if either the sample or duplicate results are below the MDC

Comments:

6-10/15/21

Sample Matrix Spike Control Assessment	MS/MSD 1	MS/MSD 2
Sample Collection Date: Sample ID: Sample MS ID: Sample MSD ID: Spike ID:		
MS/MSD Decay Corrected Spike Concentration (pCi/mL): Spike Volume Used in MS (mL): Spike Volume Used in MSD (mL): MS Aliquot (L, g, F): MS Target Conc. (pCi/L, g, F): MSD Aliquot (L, g, F): MSD Target Conc. (pCi/L, g, F): MS Spike Uncertainty (calculated): MSD Spike Uncertainty (calculated):		
Sample Result 2 Sigma CSU (pCi/L, g, F): Sample Matrix Spike Result: Matrix Spike Result 2 Sigma CSU (pCi/L, g, F): Sample Matrix Spike Duplicate Result: Matrix Spike Duplicate Result 2 Sigma CSU (pCi/L, g, F): MS Numerical Performance Indicator: MS Percent Recovery: MSD Percent Recovery: MS Status vs Numerical Indicator: MSD Status vs Numerical Indicator: MS Status vs Recovery: MSD Status vs Recovery: MS/MSD Upper % Recovery Limit: MS/MSD Lower % Recovery Limit:		

Matrix Spike/Matrix Spike Duplicate Sample Assessment
Sample ID: Sample MS ID: Sample MSD ID: Matrix Spike Result 2 Sigma CSU (pCi/L, g, F): Sample Matrix Spike Duplicate Result: Sample Matrix Spike Duplicate Result 2 Sigma CSU (pCi/L, g, F): Duplicate Numerical Performance Indicator: (Based on the Percent Recoveries) MS/MSD Duplicate RPD: MS/MSD Duplicate Status vs Numerical Indicator: MS/MSD Duplicate Status vs RPD: % RPD Limit:

Quality Control Sample Performance Assessment



Analyst Must Manually Enter All Fields Highlighted in Yellow.

Test: RA-226
 Analyst: CLA
 Date: 9/30/2021
 Worksheet: 62853
 Matrix: OW

Method Blank Assessment	
MB Sample ID	2247063
MB Concentration	0.050
MB Counting Uncertainty	0.146
MB MDC	0.360
MB Numerical Performance Indicator	0.67
MB Status vs. Numerical Indicator	N/A
MB Status vs. MDC	Pass

Laboratory Control Sample Assessment	LCS (Y or N)†	
	Y	N
Decay Corrected Spike Concentration (pCi/mL):	Count Date	LCS 062853
	Spike ID	10/7/2021
	Volume Used (mL)	19-033
	Aliquot Volume (L, g, F)	24.033
Uncertainty (Calculated):	Result (pCi/L, g, F)	0.10
	Target Conc. (pCi/L, g, F)	0.505
	Uncertainty (Calculated)	4.761
	Result (pCi/L, g, F)	0.056
LCS/LCSD Counting Uncertainty (pCi/L, g, F):	Percent Recovery	4.672
	Status vs Numerical Indicator	0.664
	Upper % Recovery Limits	0.11
	Lower % Recovery Limits	100.82%
Status vs Numerical Indicator:	Pass	N/A
	Upper % Recovery Limits	125%
	Lower % Recovery Limits	75%
	Pass	75%

Duplicate Sample Assessment	LCS (Y or N)†	
	Y	N
Sample Result Counting Uncertainty (pCi/L, g, F):	Sample ID	92560765030
	Duplicate Sample ID	92560765020DUP
	Sample Result (pCi/L, g, F)	1.170
	Sample Duplicate Result (pCi/L, g, F)	0.367
Sample Duplicate Result Counting Uncertainty (pCi/L, g, F):	Sample ID	1.196
	Duplicate Sample ID	0.354
	Sample Result (pCi/L, g, F)	See Below #
	Duplicate Result (pCi/L, g, F)	0.052
Duplicate Numerical Performance Indicator:	Based on the LCS/LCSD Percent Recoveries	1.15%
	Duplicate Status vs Numerical Indicator	N/A
	Duplicate Status vs RPD	Pass
	% RPD Limit	25%

Sample Matrix Spike Control Assessment	MS/MSD 1	MS/MSD 2
<p>Sample Collection Date</p> <p>Sample ID</p> <p>Sample MS ID</p> <p>Sample MSD ID</p> <p>Spike ID</p> <p>MS/MSD: Dilution Connected Spikes Concentration (pCi/mL)</p> <p>Spike Volume Used in MS (mL)</p> <p>Spike Volume Used in MSD (mL)</p> <p>MS Aliquot (L, g, F)</p> <p>MS Target Conc. (pCi/L, g, F)</p> <p>MSD Aliquot (L, g, F)</p> <p>MSD Target Conc. (pCi/L, g, F)</p> <p>MSD Spike Uncertainty (Calculated)</p> <p>MSD Spike Uncertainty (Calculated)</p> <p>Sample Result</p> <p>Sample Matrix Spike Result</p> <p>Matrix Spike Result Counting Uncertainty (pCi/L, g, F)</p> <p>Sample Matrix Spike Duplicate Result</p> <p>Matrix Spike Duplicate Result Counting Uncertainty (pCi/L, g, F)</p> <p>MS Numerical Performance Indicator</p> <p>MSD Numerical Performance Indicator</p> <p>MS Percent Recovery</p> <p>MSD Percent Recovery</p> <p>MS Status vs Numerical Indicator</p> <p>MSD Status vs Numerical Indicator</p> <p>MS Status vs Recovery</p> <p>MSD Status vs Recovery</p> <p>MS/MSD Upper % Recovery Limits</p> <p>MS/MSD Lower % Recovery Limits</p>		

Matrix Spike/Matrix Spike Duplicate Sample Assessment
<p>Sample ID</p> <p>Sample MS ID</p> <p>Sample MSD ID</p> <p>Sample Matrix Spike Result</p> <p>Matrix Spike Result Counting Uncertainty (pCi/L, g, F)</p> <p>Sample Matrix Spike Duplicate Result</p> <p>Matrix Spike Duplicate Result Counting Uncertainty (pCi/L, g, F)</p> <p>Duplicate Numerical Performance Indicator</p> <p>Based on the Percent Recoveries</p> <p>MS/MSD Duplicate Status vs Numerical Indicator</p> <p>MS/MSD Duplicate Status vs RPD</p> <p>% RPD Limit</p>

† Evaluation of duplicate precision is not applicable if either the sample or duplicate results are below the MDC.

Comments:

9/30/21
CLA

RAM 10/17/21

October 22, 2021

Joju Abraham
Georgia Power-CCR
2480 Maner Road
Atlanta, GA 30339

RE: Project: MCDONOUGH PIEZOMETERS
Pace Project No.: 92560139

Dear Joju Abraham:

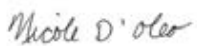
Enclosed are the analytical results for sample(s) received by the laboratory between September 09, 2021 and September 10, 2021. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

- Pace Analytical Services - Asheville
- Pace Analytical Services - Charlotte
- Pace Analytical Services - Peachtree Corners, GA

If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Nicole D'Oleo
nicole.d'oleo@pacelabs.com
(704)875-9092
Project Manager

Enclosures

cc: Stephen Benda
Daniela Herrera, Golder
Ben Hodges, Georgia Power
Kristen Jurinko
J. Shelby Mobley
Charles Norton, Southern Company
Ms. Lauren Petty, Southern Company
Dawn Prell, Golder Associates Inc.
Tim Richards, Golder Associates - Atlanta



REPORT OF LABORATORY ANALYSIS

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CERTIFICATIONS

Project: MCDONOUGH PIEZOMETERS

Pace Project No.: 92560139

Pace Analytical Services Charlotte

9800 Kinsey Ave. Ste 100, Huntersville, NC 28078
Louisiana/NELAP Certification # LA170028
North Carolina Drinking Water Certification #: 37706
North Carolina Field Services Certification #: 5342
North Carolina Wastewater Certification #: 12

South Carolina Certification #: 99006001
Florida/NELAP Certification #: E87627
Kentucky UST Certification #: 84
Virginia/VELAP Certification #: 460221

Pace Analytical Services Asheville

2225 Riverside Drive, Asheville, NC 28804
Florida/NELAP Certification #: E87648
North Carolina Drinking Water Certification #: 37712

North Carolina Wastewater Certification #: 40
South Carolina Certification #: 99030001
Virginia/VELAP Certification #: 460222

Pace Analytical Services Peachtree Corners

110 Technology Pkwy, Peachtree Corners, GA 30092
Florida DOH Certification #: E87315
Georgia DW Inorganics Certification #: 812

North Carolina Certification #: 381
South Carolina Certification #: 98011001

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SAMPLE SUMMARY

Project: MCDONOUGH PIEZOMETERS

Pace Project No.: 92560139

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92560139001	B-117D	Water	09/08/21 16:15	09/09/21 08:45
92560139002	B-118	Water	09/08/21 13:35	09/09/21 08:45
92560139003	B-119D	Water	09/08/21 15:17	09/09/21 08:45
92560139004	B-116D	Water	09/09/21 13:53	09/10/21 17:40

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SAMPLE ANALYTE COUNT

Project: MCDONOUGH PIEZOMETERS

Pace Project No.: 92560139

Lab ID	Sample ID	Method	Analysts	Analytes Reported
92560139001	B-117D	EPA 6010D	KH	1
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2011	ALW	1
		EPA 300.0 Rev 2.1 1993	CDC	3
92560139002	B-118	EPA 6010D	KH	1
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2011	ALW	1
		EPA 300.0 Rev 2.1 1993	CDC	3
92560139003	B-119D	EPA 6010D	KH	1
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2011	ALW	1
		EPA 300.0 Rev 2.1 1993	CDC	3
92560139004	B-116D	EPA 6010D	DRB	1
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2011	ALW	1
		EPA 300.0 Rev 2.1 1993	CDC	3

PASI-A = Pace Analytical Services - Asheville

PASI-C = Pace Analytical Services - Charlotte

PASI-GA = Pace Analytical Services - Peachtree Corners, GA

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: MCDONOUGH PIEZOMETERS
Pace Project No.: 92560139

Sample: B-117D		Lab ID: 92560139001		Collected: 09/08/21 16:15	Received: 09/09/21 08:45	Matrix: Water			
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data									
Analytical Method: Pace Analytical Services - Charlotte									
Performed by	CUSTOMER				1		09/09/21 10:18		
pH	6.00	Std. Units			1		09/09/21 10:18		
6010D ATL ICP									
Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA									
Calcium	11.3	mg/L	1.0	0.12	1	09/11/21 09:00	09/13/21 16:48	7440-70-2	
6020 MET ICPMS									
Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA									
Antimony	ND	mg/L	0.0030	0.00078	1	09/11/21 09:00	09/14/21 19:14	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0011	1	09/11/21 09:00	09/14/21 19:14	7440-38-2	
Barium	0.048	mg/L	0.0050	0.00067	1	09/11/21 09:00	09/14/21 19:14	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	09/11/21 09:00	09/14/21 19:14	7440-41-7	
Boron	ND	mg/L	0.040	0.0086	1	09/11/21 09:00	09/14/21 19:14	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	09/11/21 09:00	09/14/21 19:14	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	09/11/21 09:00	09/14/21 19:14	7440-47-3	
Cobalt	0.00043J	mg/L	0.0050	0.00039	1	09/11/21 09:00	09/14/21 19:14	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	09/11/21 09:00	09/14/21 19:14	7439-92-1	
Lithium	0.0069J	mg/L	0.030	0.00073	1	09/11/21 09:00	09/14/21 19:14	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	09/11/21 09:00	09/14/21 19:14	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	09/11/21 09:00	09/14/21 19:14	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	09/11/21 09:00	09/14/21 19:14	7440-28-0	
7470 Mercury									
Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA									
Mercury	ND	mg/L	0.00020	0.000078	1	09/21/21 07:00	09/21/21 11:48	7439-97-6	
2540C Total Dissolved Solids									
Analytical Method: SM 2540C-2011 Pace Analytical Services - Peachtree Corners, GA									
Total Dissolved Solids	152	mg/L	10.0	10.0	1		09/15/21 18:56		
300.0 IC Anions 28 Days									
Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville									
Chloride	6.0	mg/L	1.0	0.60	1		09/13/21 00:45	16887-00-6	
Fluoride	0.058J	mg/L	0.10	0.050	1		09/13/21 00:45	16984-48-8	
Sulfate	31.1	mg/L	1.0	0.50	1		09/13/21 00:45	14808-79-8	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: MCDONOUGH PIEZOMETERS
Pace Project No.: 92560139

Sample: B-118		Lab ID: 92560139002		Collected: 09/08/21 13:35		Received: 09/09/21 08:45		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data									
Analytical Method: Pace Analytical Services - Charlotte									
Performed by	CUSTOMER				1		09/09/21 10:18		
pH	6.01	Std. Units			1		09/09/21 10:18		
6010D ATL ICP									
Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA									
Calcium	5.0	mg/L	1.0	0.12	1	09/11/21 09:00	09/13/21 16:53	7440-70-2	
6020 MET ICPMS									
Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA									
Antimony	ND	mg/L	0.0030	0.00078	1	09/11/21 09:00	09/14/21 19:19	7440-36-0	
Arsenic	0.0011J	mg/L	0.0050	0.0011	1	09/11/21 09:00	09/14/21 19:19	7440-38-2	
Barium	0.021	mg/L	0.0050	0.00067	1	09/11/21 09:00	09/14/21 19:19	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	09/11/21 09:00	09/14/21 19:19	7440-41-7	
Boron	ND	mg/L	0.040	0.0086	1	09/11/21 09:00	09/14/21 19:19	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	09/11/21 09:00	09/14/21 19:19	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	09/11/21 09:00	09/14/21 19:19	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00039	1	09/11/21 09:00	09/14/21 19:19	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	09/11/21 09:00	09/14/21 19:19	7439-92-1	
Lithium	0.0028J	mg/L	0.030	0.00073	1	09/11/21 09:00	09/14/21 19:19	7439-93-2	
Molybdenum	0.0056J	mg/L	0.010	0.00074	1	09/11/21 09:00	09/14/21 19:19	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	09/11/21 09:00	09/14/21 19:19	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	09/11/21 09:00	09/14/21 19:19	7440-28-0	
7470 Mercury									
Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA									
Mercury	ND	mg/L	0.00020	0.000078	1	09/21/21 07:00	09/21/21 11:51	7439-97-6	
2540C Total Dissolved Solids									
Analytical Method: SM 2540C-2011 Pace Analytical Services - Peachtree Corners, GA									
Total Dissolved Solids	65.0	mg/L	10.0	10.0	1		09/15/21 18:56		
300.0 IC Anions 28 Days									
Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville									
Chloride	3.0	mg/L	1.0	0.60	1		09/13/21 01:00	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		09/13/21 01:00	16984-48-8	
Sulfate	0.99J	mg/L	1.0	0.50	1		09/13/21 01:00	14808-79-8	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: MCDONOUGH PIEZOMETERS

Pace Project No.: 92560139

Sample: B-119D		Lab ID: 92560139003		Collected: 09/08/21 15:17		Received: 09/09/21 08:45		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data									
Analytical Method: Pace Analytical Services - Charlotte									
Performed by	CUSTOMER				1		09/09/21 10:19		
pH	6.88	Std. Units			1		09/09/21 10:19		
6010D ATL ICP									
Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA									
Calcium	20.2	mg/L	1.0	0.12	1	09/11/21 09:00	09/13/21 16:57	7440-70-2	
6020 MET ICPMS									
Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA									
Antimony	0.00087J	mg/L	0.0030	0.00078	1	09/11/21 09:00	09/14/21 19:25	7440-36-0	
Arsenic	0.0014J	mg/L	0.0050	0.0011	1	09/11/21 09:00	09/14/21 19:25	7440-38-2	
Barium	0.0080	mg/L	0.0050	0.00067	1	09/11/21 09:00	09/14/21 19:25	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	09/11/21 09:00	09/14/21 19:25	7440-41-7	
Boron	0.018J	mg/L	0.040	0.0086	1	09/11/21 09:00	09/14/21 19:25	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	09/11/21 09:00	09/14/21 19:25	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	09/11/21 09:00	09/14/21 19:25	7440-47-3	
Cobalt	0.00077J	mg/L	0.0050	0.00039	1	09/11/21 09:00	09/14/21 19:25	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	09/11/21 09:00	09/14/21 19:25	7439-92-1	
Lithium	0.0028J	mg/L	0.030	0.00073	1	09/11/21 09:00	09/14/21 19:25	7439-93-2	
Molybdenum	0.022	mg/L	0.010	0.00074	1	09/11/21 09:00	09/14/21 19:25	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	09/11/21 09:00	09/14/21 19:25	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	09/11/21 09:00	09/14/21 19:25	7440-28-0	
7470 Mercury									
Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA									
Mercury	ND	mg/L	0.00020	0.000078	1	09/21/21 07:00	09/21/21 11:59	7439-97-6	
2540C Total Dissolved Solids									
Analytical Method: SM 2540C-2011 Pace Analytical Services - Peachtree Corners, GA									
Total Dissolved Solids	191	mg/L	10.0	10.0	1		09/15/21 18:56		
300.0 IC Anions 28 Days									
Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville									
Chloride	7.5	mg/L	1.0	0.60	1		09/13/21 01:16	16887-00-6	
Fluoride	0.16	mg/L	0.10	0.050	1		09/13/21 01:16	16984-48-8	
Sulfate	76.2	mg/L	1.0	0.50	1		09/13/21 01:16	14808-79-8	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: MCDONOUGH PIEZOMETERS
Pace Project No.: 92560139

Sample: B-116D		Lab ID: 92560139004		Collected: 09/09/21 13:53		Received: 09/10/21 17:40		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data									
Analytical Method: Pace Analytical Services - Charlotte									
Performed by	CUSTOMER				1		09/13/21 08:34		
pH	6.02	Std. Units			1		09/13/21 08:34		
6010D ATL ICP									
Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA									
Calcium	9.9	mg/L	1.0	0.12	1	09/17/21 11:09	09/17/21 19:05	7440-70-2	
6020 MET ICPMS									
Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA									
Antimony	ND	mg/L	0.0030	0.00078	1	09/17/21 11:11	09/17/21 16:17	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0011	1	09/17/21 11:11	09/17/21 16:17	7440-38-2	
Barium	0.017	mg/L	0.0050	0.00067	1	09/17/21 11:11	09/17/21 16:17	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	09/17/21 11:11	09/17/21 16:17	7440-41-7	
Boron	ND	mg/L	0.040	0.0086	1	09/17/21 11:11	09/17/21 16:17	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	09/17/21 11:11	09/17/21 16:17	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	09/17/21 11:11	09/17/21 16:17	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00039	1	09/17/21 11:11	09/17/21 16:17	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	09/17/21 11:11	09/17/21 16:17	7439-92-1	
Lithium	0.0055J	mg/L	0.030	0.00073	1	09/17/21 11:11	09/17/21 16:17	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	09/17/21 11:11	09/17/21 16:17	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	09/17/21 11:11	09/17/21 16:17	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	09/17/21 11:11	09/17/21 16:17	7440-28-0	
7470 Mercury									
Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA									
Mercury	ND	mg/L	0.00020	0.000078	1	09/21/21 07:00	09/21/21 12:01	7439-97-6	
2540C Total Dissolved Solids									
Analytical Method: SM 2540C-2011 Pace Analytical Services - Peachtree Corners, GA									
Total Dissolved Solids	93.0	mg/L	10.0	10.0	1		09/15/21 18:58		
300.0 IC Anions 28 Days									
Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville									
Chloride	2.7	mg/L	1.0	0.60	1		09/15/21 06:23	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		09/15/21 06:23	16984-48-8	
Sulfate	0.73J	mg/L	1.0	0.50	1		09/15/21 06:23	14808-79-8	

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: MCDONOUGH PIEZOMETERS
Pace Project No.: 92560139

QC Batch: 646610 Analysis Method: EPA 6010D
QC Batch Method: EPA 3010A Analysis Description: 6010D ATL
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92560139001, 92560139002, 92560139003

METHOD BLANK: 3391819 Matrix: Water
Associated Lab Samples: 92560139001, 92560139002, 92560139003

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Calcium	mg/L	ND	1.0	0.12	09/13/21 14:48	

LABORATORY CONTROL SAMPLE: 3391820

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Calcium	mg/L	1	1.1	107	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3391821 3391822

Parameter	Units	MS		MSD		MS		MSD		% Rec Limits	RPD	Max RPD	Qual
		Spike Conc.	Spike Conc.	Result	Result	% Rec	% Rec						
Calcium	mg/L	1.4	1	1	2.5	2.5	106	109	75-125	1	20		

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QUALITY CONTROL DATA

Project: MCDONOUGH PIEZOMETERS
Pace Project No.: 92560139

QC Batch: 648035 Analysis Method: EPA 6010D
QC Batch Method: EPA 3010A Analysis Description: 6010D ATL
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92560139004

METHOD BLANK: 3398813 Matrix: Water
Associated Lab Samples: 92560139004

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Calcium	mg/L	ND	1.0	0.12	09/17/21 18:21	

LABORATORY CONTROL SAMPLE: 3398814

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Calcium	mg/L	1	1.0	103	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3398815 3398816

Parameter	Units	3398815		3398816		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		92560138002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result						
Calcium	mg/L	18.3	1	1	18.8	19.3	57	102	75-125	2	20 M1

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QUALITY CONTROL DATA

Project: MCDONOUGH PIEZOMETERS
Pace Project No.: 92560139

QC Batch: 646612 Analysis Method: EPA 6020B
QC Batch Method: EPA 3005A Analysis Description: 6020 MET
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92560139001, 92560139002, 92560139003

METHOD BLANK: 3391827 Matrix: Water
Associated Lab Samples: 92560139001, 92560139002, 92560139003

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	mg/L	ND	0.0030	0.00078	09/14/21 17:25	
Arsenic	mg/L	ND	0.0050	0.0011	09/14/21 17:25	
Barium	mg/L	ND	0.0050	0.00067	09/14/21 17:25	
Beryllium	mg/L	ND	0.00050	0.000054	09/14/21 17:25	
Boron	mg/L	ND	0.040	0.0086	09/14/21 17:25	
Cadmium	mg/L	ND	0.00050	0.00011	09/14/21 17:25	
Chromium	mg/L	ND	0.0050	0.0011	09/14/21 17:25	
Cobalt	mg/L	ND	0.0050	0.00039	09/14/21 17:25	
Lead	mg/L	ND	0.0010	0.00089	09/14/21 17:25	
Lithium	mg/L	ND	0.030	0.00073	09/14/21 17:25	
Molybdenum	mg/L	ND	0.010	0.00074	09/14/21 17:25	
Selenium	mg/L	ND	0.0050	0.0014	09/14/21 17:25	
Thallium	mg/L	ND	0.0010	0.00018	09/14/21 17:25	

LABORATORY CONTROL SAMPLE: 3391828

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	mg/L	0.1	0.099	99	80-120	
Arsenic	mg/L	0.1	0.099	99	80-120	
Barium	mg/L	0.1	0.096	96	80-120	
Beryllium	mg/L	0.1	0.098	98	80-120	
Boron	mg/L	1	1.0	101	80-120	
Cadmium	mg/L	0.1	0.095	95	80-120	
Chromium	mg/L	0.1	0.094	94	80-120	
Cobalt	mg/L	0.1	0.097	97	80-120	
Lead	mg/L	0.1	0.094	94	80-120	
Lithium	mg/L	0.1	0.099	99	80-120	
Molybdenum	mg/L	0.1	0.098	98	80-120	
Selenium	mg/L	0.1	0.098	98	80-120	
Thallium	mg/L	0.1	0.094	94	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3391829 3391830

Parameter	Units	92559417001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Antimony	mg/L	ND	0.1	0.1	0.10	0.10	101	100	75-125	1	20	
Arsenic	mg/L	ND	0.1	0.1	0.10	0.099	100	98	75-125	1	20	

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QUALITY CONTROL DATA

Project: MCDONOUGH PIEZOMETERS

Pace Project No.: 92560139

Parameter	Units	3391829		3391830		MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	Max RPD	RPD	Qual
		92559417001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result								
Barium	mg/L	0.028	0.1	0.1	0.13	0.13	98	99	75-125	0	20		
Beryllium	mg/L	0.00016J	0.1	0.1	0.097	0.099	97	98	75-125	2	20		
Boron	mg/L	1.2	1	1	2.3	2.5	92	116	75-125	10	20		
Cadmium	mg/L	ND	0.1	0.1	0.096	0.095	96	95	75-125	1	20		
Chromium	mg/L	ND	0.1	0.1	0.10	0.10	102	101	75-125	0	20		
Cobalt	mg/L	ND	0.1	0.1	0.10	0.098	101	98	75-125	4	20		
Lead	mg/L	ND	0.1	0.1	0.094	0.095	94	95	75-125	1	20		
Lithium	mg/L	0.0014J	0.1	0.1	0.099	0.10	98	102	75-125	4	20		
Molybdenum	mg/L	ND	0.1	0.1	0.10	0.10	102	102	75-125	1	20		
Selenium	mg/L	0.021	0.1	0.1	0.12	0.12	100	101	75-125	1	20		
Thallium	mg/L	ND	0.1	0.1	0.095	0.097	95	97	75-125	2	20		

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QUALITY CONTROL DATA

Project: MCDONOUGH PIEZOMETERS

Pace Project No.: 92560139

QC Batch: 648036

Analysis Method: EPA 6020B

QC Batch Method: EPA 3005A

Analysis Description: 6020 MET

Laboratory: Pace Analytical Services - Peachtree Corners, GA

Associated Lab Samples: 92560139004

METHOD BLANK: 3398822

Matrix: Water

Associated Lab Samples: 92560139004

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	mg/L	ND	0.0030	0.00078	09/17/21 15:37	
Arsenic	mg/L	ND	0.0050	0.0011	09/17/21 15:37	
Barium	mg/L	ND	0.0050	0.00067	09/17/21 15:37	
Beryllium	mg/L	ND	0.00050	0.000054	09/17/21 15:37	
Boron	mg/L	ND	0.040	0.0086	09/17/21 15:37	
Cadmium	mg/L	ND	0.00050	0.00011	09/17/21 15:37	
Chromium	mg/L	ND	0.0050	0.0011	09/17/21 15:37	
Cobalt	mg/L	ND	0.0050	0.00039	09/17/21 15:37	
Lead	mg/L	ND	0.0010	0.00089	09/17/21 15:37	
Lithium	mg/L	ND	0.030	0.00073	09/17/21 15:37	
Molybdenum	mg/L	ND	0.010	0.00074	09/17/21 15:37	
Selenium	mg/L	ND	0.0050	0.0014	09/17/21 15:37	
Thallium	mg/L	ND	0.0010	0.00018	09/17/21 15:37	

LABORATORY CONTROL SAMPLE: 3398823

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	mg/L	0.1	0.10	100	80-120	
Arsenic	mg/L	0.1	0.097	97	80-120	
Barium	mg/L	0.1	0.097	97	80-120	
Beryllium	mg/L	0.1	0.097	97	80-120	
Boron	mg/L	1	1.0	101	80-120	
Cadmium	mg/L	0.1	0.099	99	80-120	
Chromium	mg/L	0.1	0.096	96	80-120	
Cobalt	mg/L	0.1	0.10	101	80-120	
Lead	mg/L	0.1	0.095	95	80-120	
Lithium	mg/L	0.1	0.10	101	80-120	
Molybdenum	mg/L	0.1	0.10	101	80-120	
Selenium	mg/L	0.1	0.096	96	80-120	
Thallium	mg/L	0.1	0.094	94	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3398824 3398825

Parameter	Units	92560138002 Result	MS		MSD		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
			Spike Conc.	MS Spike Conc.	MSD Spike Conc.	MSD Result						
Antimony	mg/L	ND	0.1	0.1	0.10	0.10	104	103	75-125	0	20	
Arsenic	mg/L	ND	0.1	0.1	0.10	0.099	100	98	75-125	2	20	

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QUALITY CONTROL DATA

Project: MCDONOUGH PIEZOMETERS

Pace Project No.: 92560139

Parameter	Units	3398824		3398825		MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	Max RPD	RPD	Qual
		92560138002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result								
Barium	mg/L	0.099	0.1	0.1	0.21	0.20	114	102	75-125	6	20		
Beryllium	mg/L	ND	0.1	0.1	0.091	0.096	91	96	75-125	5	20		
Boron	mg/L	0.065	1	1	0.97	1.0	91	97	75-125	6	20		
Cadmium	mg/L	ND	0.1	0.1	0.10	0.099	101	99	75-125	2	20		
Chromium	mg/L	ND	0.1	0.1	0.10	0.10	103	100	75-125	3	20		
Cobalt	mg/L	0.0064	0.1	0.1	0.11	0.10	105	98	75-125	7	20		
Lead	mg/L	ND	0.1	0.1	0.099	0.099	99	98	75-125	0	20		
Lithium	mg/L	0.0091J	0.1	0.1	0.10	0.11	94	99	75-125	5	20		
Molybdenum	mg/L	0.025	0.1	0.1	0.13	0.12	101	99	75-125	2	20		
Selenium	mg/L	ND	0.1	0.1	0.093	0.095	92	95	75-125	3	20		
Thallium	mg/L	ND	0.1	0.1	0.10	0.10	100	100	75-125	0	20		

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QUALITY CONTROL DATA

Project: MCDONOUGH PIEZOMETERS

Pace Project No.: 92560139

QC Batch: 648334

Analysis Method: EPA 7470A

QC Batch Method: EPA 7470A

Analysis Description: 7470 Mercury

Laboratory: Pace Analytical Services - Peachtree Corners, GA

Associated Lab Samples: 92560139001, 92560139002, 92560139003, 92560139004

METHOD BLANK: 3400299

Matrix: Water

Associated Lab Samples: 92560139001, 92560139002, 92560139003, 92560139004

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	mg/L	ND	0.00020	0.000078	09/21/21 10:38	

LABORATORY CONTROL SAMPLE: 3400300

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	mg/L	0.0025	0.0025	101	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3400301 3400302

Parameter	Units	3400301		3400302		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result						
Mercury	mg/L	ND	0.0025	0.0024	0.0023	92	91	75-125	2	20	

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QUALITY CONTROL DATA

Project: MCDONOUGH PIEZOMETERS

Pace Project No.: 92560139

QC Batch: 647027	Analysis Method: SM 2540C-2011
QC Batch Method: SM 2540C-2011	Analysis Description: 2540C Total Dissolved Solids
	Laboratory: Pace Analytical Services - Peachtree Corners, GA

Associated Lab Samples: 92560139001, 92560139002, 92560139003, 92560139004

METHOD BLANK: 3393790 Matrix: Water
Associated Lab Samples: 92560139001, 92560139002, 92560139003, 92560139004

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	ND	10.0	10.0	09/15/21 18:56	

LABORATORY CONTROL SAMPLE: 3393791

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	400	390	98	90-111	

SAMPLE DUPLICATE: 3393792

Parameter	Units	92560138001 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	75.0	78.0	4	10	

SAMPLE DUPLICATE: 3393793

Parameter	Units	92560281005 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	133	139	4	10	

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QUALITY CONTROL DATA

Project: MCDONOUGH PIEZOMETERS
Pace Project No.: 92560139

QC Batch: 646662 Analysis Method: EPA 300.0 Rev 2.1 1993
QC Batch Method: EPA 300.0 Rev 2.1 1993 Analysis Description: 300.0 IC Anions
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 92560139001, 92560139002, 92560139003

METHOD BLANK: 3391993 Matrix: Water
Associated Lab Samples: 92560139001, 92560139002, 92560139003

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	0.60	09/12/21 19:51	
Fluoride	mg/L	ND	0.10	0.050	09/12/21 19:51	
Sulfate	mg/L	ND	1.0	0.50	09/12/21 19:51	

LABORATORY CONTROL SAMPLE: 3391994

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	50	50.2	100	90-110	
Fluoride	mg/L	2.5	2.4	97	90-110	
Sulfate	mg/L	50	51.4	103	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3391995 3391996

Parameter	Units	92560743001		3391995		3391996		% Rec Limits	RPD	Max RPD	Qual	
		MS Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec					MSD % Rec
Chloride	mg/L	298	50	50	346	344	96	91	90-110	1	10	
Fluoride	mg/L	13.7	2.5	2.5	21.8	21.5	326	310	90-110	2	10	M1
Sulfate	mg/L	702	50	50	717	721	28	36	90-110	1	10	M1

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3391997 3391998

Parameter	Units	92560743011		3391997		3391998		% Rec Limits	RPD	Max RPD	Qual	
		MS Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec					MSD % Rec
Chloride	mg/L	66.1	50	50	144	145	156	158	90-110	1	10	M1
Fluoride	mg/L	3.4	2.5	2.5	1.4	1.4	-81	-79	90-110	4	10	M1
Sulfate	mg/L	82.0	50	50	131	131	98	98	90-110	0	10	

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QUALITY CONTROL DATA

Project: MCDONOUGH PIEZOMETERS
Pace Project No.: 92560139

QC Batch: 647162 Analysis Method: EPA 300.0 Rev 2.1 1993
QC Batch Method: EPA 300.0 Rev 2.1 1993 Analysis Description: 300.0 IC Anions
Laboratory: Pace Analytical Services - Asheville

Associated Lab Samples: 92560139004

METHOD BLANK: 3394748 Matrix: Water
Associated Lab Samples: 92560139004

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	0.60	09/14/21 22:53	
Fluoride	mg/L	ND	0.10	0.050	09/14/21 22:53	
Sulfate	mg/L	ND	1.0	0.50	09/14/21 22:53	

LABORATORY CONTROL SAMPLE: 3394749

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	50	50.4	101	90-110	
Fluoride	mg/L	2.5	2.4	97	90-110	
Sulfate	mg/L	50	50.9	102	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3394750 3394751

Parameter	Units	MS		MSD		MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		92560938001	Spike Conc.	Spike Conc.	Result								
Chloride	mg/L	3.0	50	50	58.4	61.9	111	118	90-110	6	10	M1	
Fluoride	mg/L	0.091J	2.5	2.5	3.4	3.5	131	134	90-110	2	10	M1	
Sulfate	mg/L	33.4	50	50	88.5	91.8	110	117	90-110	4	10	M1	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3394752 3394753

Parameter	Units	MS		MSD		MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		92560676003	Spike Conc.	Spike Conc.	Result								
Chloride	mg/L	146	50	50	196	198	99	105	90-110	1	10		
Fluoride	mg/L	0.29	2.5	2.5	4.9	4.8	184	179	90-110	2	10	M1	
Sulfate	mg/L	140	50	50	193	195	105	109	90-110	1	10		

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3394754 3394755

Parameter	Units	MS		MSD		MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		92560676001	Spike Conc.	Spike Conc.	Result								
Chloride	mg/L	4.9	50	50	62.8	64.2	116	119	90-110	2	10	M1	
Fluoride	mg/L	0.40	2.5	2.5	3.5	3.6	124	127	90-110	2	10	M1	
Sulfate	mg/L	3.8	50	50	62.4	63.7	117	120	90-110	2	10	M1	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

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without the written consent of Pace Analytical Services, LLC.

QUALIFIERS

Project: MCDONOUGH PIEZOMETERS

Pace Project No.: 92560139

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

Acid preservation may not be appropriate for 2 Chloroethylvinyl ether.

A separate vial preserved to a pH of 4-5 is recommended in SW846 Chapter 4 for the analysis of Acrolein and Acrylonitrile by EPA Method 8260.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Reported results are not rounded until the final step prior to reporting. Therefore, calculated parameters that are typically reported as "Total" may vary slightly from the sum of the reported component parameters.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

ANALYTE QUALIFIERS

M1 Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: MCDONOUGH PIEZOMETERS
Pace Project No.: 92560139

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92560139001	B-117D				
92560139002	B-118				
92560139003	B-119D				
92560139004	B-116D				
92560139001	B-117D	EPA 3010A	646610	EPA 6010D	646635
92560139002	B-118	EPA 3010A	646610	EPA 6010D	646635
92560139003	B-119D	EPA 3010A	646610	EPA 6010D	646635
92560139004	B-116D	EPA 3010A	648035	EPA 6010D	648116
92560139001	B-117D	EPA 3005A	646612	EPA 6020B	646637
92560139002	B-118	EPA 3005A	646612	EPA 6020B	646637
92560139003	B-119D	EPA 3005A	646612	EPA 6020B	646637
92560139004	B-116D	EPA 3005A	648036	EPA 6020B	648158
92560139001	B-117D	EPA 7470A	648334	EPA 7470A	648431
92560139002	B-118	EPA 7470A	648334	EPA 7470A	648431
92560139003	B-119D	EPA 7470A	648334	EPA 7470A	648431
92560139004	B-116D	EPA 7470A	648334	EPA 7470A	648431
92560139001	B-117D	SM 2540C-2011	647027		
92560139002	B-118	SM 2540C-2011	647027		
92560139003	B-119D	SM 2540C-2011	647027		
92560139004	B-116D	SM 2540C-2011	647027		
92560139001	B-117D	EPA 300.0 Rev 2.1 1993	646662		
92560139002	B-118	EPA 300.0 Rev 2.1 1993	646662		
92560139003	B-119D	EPA 300.0 Rev 2.1 1993	646662		
92560139004	B-116D	EPA 300.0 Rev 2.1 1993	647162		

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
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Laboratory receiving samples:

Asheville Eden Greenwood Huntersville Raleigh Mechanicsville Atlanta Kernersville

Sample Condition Upon Receipt

Client Name: GA Power

Project #: **WO# : 92560139**



Courier: Commercial Fed Ex UPS USPS Client Pace Other: _____

Custody Seal Present? Yes No Seals Intact? Yes No

Date/Initials Person Examining Contents: 9/24/24
CSW

Packing Material: Bubble Wrap Bubble Bags None Other
Thermometer: IR Gun ID: 214 Type of Ice: Wet Blue None

Biological Tissue Frozen? Yes No N/A

Cooler Temp: 2.6 Correction Factor: Add/Subtract (°C) +0.1

Temp should be above freezing to 6°C
 Samples out of temp criteria. Samples on ice, cooling process has begun

Cooler Temp Corrected (°C): 2.5

USDA Regulated Soil (N/A, water sample)
Did samples originate in a quarantine zone within the United States: CA, NY, or SC (check maps)? Yes No

Did samples originate from a foreign source (internationally, including Hawaii and Puerto Rico)? Yes No

		Comments/Discrepancy:
Chain of Custody Present?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	1.
Samples Arrived within Hold Time?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	2.
Short Hold Time Analysis (<72 hr.)?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	3.
Rush Turn Around Time Requested?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	4.
Sufficient Volume?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	5.
Correct Containers Used?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	6.
-Pace Containers Used?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Containers Intact?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	7.
Dissolved analysis: Samples Field Filtered?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	8.
Sample Labels Match COC?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	9.
-Includes Date/Time/ID/Analysis Matrix:	<u>W</u>	
Headspace in VOA Vials (>5-6mm)?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	10.
Trip Blank Present?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	11.
Trip Blank Custody Seals Present?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	

COMMENTS/SAMPLE DISCREPANCY Field Data Required? Yes No

Lot ID of split containers: _____

CLIENT NOTIFICATION/RESOLUTION

Person contacted: _____ Date/Time: _____

Project Manager SCURF Review: _____ Date: _____

Project Manager SRF Review: _____ Date: _____

*Check mark top half of box if pH and/or dechlorination is verified and within the acceptance range for preservation samples.

Exceptions: VOA, Coliform, TOC, Oil and Grease, DRO/8015 (water) DOC, LLHG

**Bottom half of box is to list number of bottles

Project # **WO# : 92560139**

PM: NMG Due Date: 09/23/21

CLIENT: GA-GA Power

Item#	BP4U-125 mL Plastic Unpreserved (N/A) (Cl-)	BP3U-250 mL Plastic Unpreserved (N/A)	BP2U-500 mL Plastic Unpreserved (N/A)	BP1U-1 liter Plastic Unpreserved (N/A)	BP4S-125 mL Plastic H2SO4 (pH < 2) (Cl-)	BP3N-250 mL plastic HNO3 (pH < 2)	BP4Z-125 mL Plastic ZN Acetate & NaOH (>9)	BP4C-125 mL Plastic NaOH (pH > 12) (Cl-)	WGFU-Wide-mouthed Glass jar Unpreserved	AG1U-1 liter Amber Unpreserved (N/A) (Cl-)	AG1H-1 liter Amber HCl (pH < 2)	AG3U-250 mL Amber Unpreserved (N/A) (Cl-)	AG1S-1 liter Amber H2SO4 (pH < 2)	AG3S-250 mL Amber H2SO4 (pH < 2)	AG3A(DG3A)-250 mL Amber NH4Cl (N/A)(Cl-)	DG9H-40 mL VOA HCl (N/A)	VG9T-40 mL VOA Na2S2O3 (N/A)	VG9U-40 mL VOA Unp (N/A)	DG9P-40 mL VOA H3PO4 (N/A)	VOAK (6 vials per kit)-5035 kit (N/A)	V/GK (3 vials per kit)-VPH/Gas kit (N/A)	SP5T-125 mL Sterile Plastic (N/A - lab)	SP2T-250 mL Sterile Plastic (N/A - lab)	BP3A-250 mL Plastic (NH2)2SO4 (9.3-9.7)	AG0U-100 mL Amber Unpreserved vials (N/A)	VSGU-20 mL Scintillation vials (N/A)	DG9U-40 mL Amber Unpreserved vials (N/A)	
1	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
2	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
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10	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
11	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
12	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/

pH Adjustment Log for Preserved Samples

Sample ID	Type of Preservative	pH upon receipt	Date preservation adjusted	Time preservation adjusted	Amount of Preservative added	Lot #

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. Out of hold, incorrect preservative, out of temp, incorrect containers.



CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Page: 1 of 1

Section A Client Information: Name: Georgia Power - Coal Combustion Residuals Address: 2480 Mable Road Atlanta, GA 30339 Email: jforshaw@southemco.com Phone: (404) 505-1239 Project Due Date: 10 Day TAT	Section B Required Project Information: Report To: Jon Abraham Copy To: Odeh Purchase Order #: Project Name: Plant McDonough Perimeters Project #: 10049021 Pico Profile #: Pico Project Manager: Kevin Henry
Section C Service Information: Agency: eshinc@esg.southemco.com Company Name: Address: Pico Guide: Pico Project Manager: Kevin Henry Regulatory Agency: State / Location: GA	

ITEM #	MATRIX	CODE	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	DATE	TIME	PRESERVATIVES							ANALYSES TEST			Residual Chlorine (Y/N)	pH	
							# OF CONTAINERS	Unpreserved - Ice	H2BO4	HNO3 + Ice	HCl	NaOH + Zn Acetate	Na2S2O3	Methanol	Other	Y/N			App I M/V Total Metals
1	B-17D	WT	G	G	9/8/2021	16:15	5	2	3										pH = 8.00
2	B-118	WT	G	G	9/9/2021	13:35	5	2	3										pH = 8.01
3	B-18D	WT	G	G	9/9/2021	15:17	5	2	3										pH = 8.88
4																			
5																			
6																			
7																			
8																			
9																			
10																			
11																			
12																			
13																			
14																			

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME
	SW / Saver	9/9/21	8:11	ELVOZ	9/9/21	8:10
	ELVOZ	9-9-21	8:15	Charles Jordan	9/9/21	08:15

TEMP in C	Received on Ice (Y/N)
Jobe WAGNERACK	Custody Bated Cooler (Y/N)
SW...	Samples Intact (Y/N)
DATE Signed: 9/9/21	



Document Name:
Sample Condition Upon Receipt (SCUR)
 Document No.:
F-CAR-CS-033-Rev.07

Document Revised: October 28, 2020
 Page 1 of 2
 Issuing Authority:
 Pace Carolinas Quality Office

Laboratory receiving samples:

Asheville Eden Greenwood Huntersville Raleigh Mechanicsville Atlanta Kernersville

Sample Condition Upon Receipt

Client Name:

Georgia Power

Project #:

Courier: Fed Ex UPS USPS Client
 Commercial Pace Other: _____

Custody Seal Present? Yes No Seals Intact? Yes No

Date/Initials Person Examining Contents: MT 9/10/21

Packing Material: Bubble Wrap Bubble Bags None Other

Biological Tissue Frozen?

Yes No N/A

Thermometer: IR Gun ID: 230 Type of Ice: Wet Blue None

Cooler Temp: 3.4 Correction Factor: Add/Subtract (°C) ± 0.1

Temp should be above freezing to 6°C

Samples out of temp criteria. Samples on ice, cooling process has begun

Cooler Temp Corrected (°C): 3.5

USDA Regulated Soil (N/A, water sample)

Did samples originate in a quarantine zone within the United States: CA, NY, or SC (check maps)?

Yes No

Did samples originate from a foreign source (internationally, including Hawaii and Puerto Rico)? Yes No

	Comments/Discrepancy:
Chain of Custody Present? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	1.
Samples Arrived within Hold Time? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	2.
Short Hold Time Analysis (<72 hr.)? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	3.
Rush Turn Around Time Requested? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	4.
Sufficient Volume? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	5.
Correct Containers Used? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	6.
-Pace Containers Used? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Containers intact? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	7.
Dissolved analysis: Samples Field Filtered? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	8.
Sample Labels Match COC? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	9.
-Includes Date/Time/ID/Analysis Matrix: <u>WT</u>	
Headspace in VOA Vials (>5-6mm)? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	10.
Trip Blank Present? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	11.
Trip Blank Custody Seals Present? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	

COMMENTS/SAMPLE DISCREPANCY

Field Data Required? Yes No

Lot ID of split containers:

CLIENT NOTIFICATION/RESOLUTION

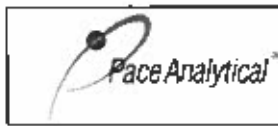
Person contacted: _____ Date/Time: _____

Project Manager SCURF Review: _____

Date: _____

Project Manager SRF Review: _____

Date: _____



Document Name:
Sample Condition Upon Receipt(SCUR)

Document Revised: October 28, 2020
Page 2 of 2

Document No.:
F-CAR-CS-033-Rev.07

Issuing Authority:
Pace Carolinas Quality Office

*Check mark top half of box if pH and/or dechlorination is verified and within the acceptance range for preservation samples.

Project #

Exceptions: VDA, Coliform, TOC, Oil and Grease, DRO/8015 (water) DOC, LLHg

**Bottom half of box is to list number of bottles

--

Item#	BP4U-125 mL Plastic Unpreserved (N/A) (Cl-)	BP2U-250 mL Plastic Unpreserved (N/A)	BP2U-500 mL Plastic Unpreserved (N/A)	BP1U-1 liter Plastic Unpreserved (N/A)	BP4S-125 mL Plastic H2SO4 (pH < 2) (Cl-)	BP3N-250 mL plastic HNO3 (pH < 2)	BP4Z-125 mL Plastic Zn Acetate & NaOH (>9)	BP4C-125 mL Plastic NaOH (pH > 12) (Cl-)	WGFLU-Wide-mouthed Glass Jar Unpreserved	AG1U-1 liter Amber Unpreserved (N/A) (Cl-)	AG1H-1 liter Amber HCl (pH < 2)	AG3U-250 mL Amber Unpreserved (N/A) (Cl-)	AG1S-1 liter Amber H2SO4 (pH < 2)	AG3S-250 mL Amber H2SO4 (pH < 2)	AG3A(DG3A)-250 mL Amber NH4Cl (N/A)(Cl-)	DG9H-40 mL VDA HCl (N/A)	VG9T-40 mL VDA Na2S2O3 (N/A)	VG9U-40 mL VOA Unp (N/A)	DG9P-40 mL VOA H3PO4 (N/A)	VOAK (6 vials per kit)-5035 kit (N/A)	V/GK (3 vials per kit)-VPH/Gas kit (N/A)	SP5T-125 mL Sterile Plastic (N/A - lab)	SP2T-250 mL Sterile Plastic (N/A - lab)	BP3A-250 mL Plastic (NH2)2SO4 (9.3-9.7)	AG6U-100 mL Amber Unpreserved vials (N/A)	VSGU-20 mL Sanitillation vials (N/A)	DG9U-40 mL Amber Unpreserved vials (N/A)		
1																													
2																													
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4																													
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8																													
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10																													
11																													
12																													

pH Adjustment Log for Preserved Samples

Sample ID	Type of Preservative	pH upon receipt	Date preservation adjusted	Time preservation adjusted	Amount of Preservative added	Lot #

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. Out of hold, incorrect preservative, out of temp, incorrect containers).



CHAIN-OF-CUSTODY / Analytical Request Document
 The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Section A Required Client Information: Section B Required Project Information: Section C Analytical Information:

Company: Georgia Power - Coal Combustion Residuals
 Address: 2480 Manor Road
 Atlanta, GA 30339
 Phone: (404) 596-7239
 Fax: (404) 596-7239
 Email: jordanm@gepower.com
 Requested Date: 10 Day TAT

Requester Name: Joe Nathan
 Project Name: Plant McDonough Parameters
 Project # 19594021

Company Name: Kameron
 Address: kameron@gepower.com
 Project Manager: Kevin Henry

Regulatory Agency: SMTA / Location: GA

ITEM #	MATRIX	CONCENTRATION	DATE	TIME	ANALYSES TEST	Y/N	RESIDUAL CHLORINE (Y/N)	pH
1	B-1160		9/10/21	13:53	Aspirin Total Metals Cl F, SO4, TDS Radium 226/228	X X X		6.02
2								
3								
4								
5								
6								
7								
8								
9								
10								
11								
12								
13								

ACQUIRED BY / AFFILIATION: *W. Bank* DATE: *9/10/21* TIME: *17:50*

ACQUIRED BY / AFFILIATION: *Chris Lee Hank* DATE: *9/10/21* TIME: *17:48*

TEMP °C: _____

Received or Ice (Y/N): _____

Cooling Sealed Cooler (Y/N): _____

Sample Intact (Y/N): _____

Jude Wagnerspack DATE SIGNED: *9/10/21*

October 22, 2021

Joju Abraham
Georgia Power-CCR
2480 Maner Road
Atlanta, GA 30339

RE: Project: MCDONOUGH PIEZOMETERS RADS
Pace Project No.: 92560137

Dear Joju Abraham:

Enclosed are the analytical results for sample(s) received by the laboratory between September 09, 2021 and September 10, 2021. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

- Pace Analytical Services - Greensburg

If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Nicole D'Oleo
nicole.d'oleo@pacelabs.com
(704)875-9092
Project Manager

Enclosures

cc: Stephen Benda
Daniela Herrera, Golder
Ben Hodges, Georgia Power
Kristen Jurinko
J. Shelby Mobley
Charles Norton, Southern Company
Ms. Lauren Petty, Southern Company
Dawn Prell, Golder Associates Inc.
Tim Richards, Golder Associates - Atlanta



REPORT OF LABORATORY ANALYSIS

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CERTIFICATIONS

Project: MCDONOUGH PIEZOMETERS RADS
Pace Project No.: 92560137

Pace Analytical Services Pennsylvania

1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601
ANAB DOD-ELAP Rad Accreditation #: L2417
Alabama Certification #: 41590
Arizona Certification #: AZ0734
Arkansas Certification
California Certification #: 04222CA
Colorado Certification #: PA01547
Connecticut Certification #: PH-0694
Delaware Certification
EPA Region 4 DW Rad
Florida/TNI Certification #: E87683
Georgia Certification #: C040
Florida: Cert E871149 SEKS WET
Guam Certification
Hawaii Certification
Idaho Certification
Illinois Certification
Indiana Certification
Iowa Certification #: 391
Kansas/TNI Certification #: E-10358
Kentucky Certification #: KY90133
KY WW Permit #: KY0098221
KY WW Permit #: KY0000221
Louisiana DHH/TNI Certification #: LA180012
Louisiana DEQ/TNI Certification #: 4086
Maine Certification #: 2017020
Maryland Certification #: 308
Massachusetts Certification #: M-PA1457
Michigan/PADEP Certification #: 9991

Missouri Certification #: 235
Montana Certification #: Cert0082
Nebraska Certification #: NE-OS-29-14
Nevada Certification #: PA014572018-1
New Hampshire/TNI Certification #: 297617
New Jersey/TNI Certification #: PA051
New Mexico Certification #: PA01457
New York/TNI Certification #: 10888
North Carolina Certification #: 42706
North Dakota Certification #: R-190
Ohio EPA Rad Approval: #41249
Oregon/TNI Certification #: PA200002-010
Pennsylvania/TNI Certification #: 65-00282
Puerto Rico Certification #: PA01457
Rhode Island Certification #: 65-00282
South Dakota Certification
Tennessee Certification #: 02867
Texas/TNI Certification #: T104704188-17-3
Utah/TNI Certification #: PA014572017-9
USDA Soil Permit #: P330-17-00091
Vermont Dept. of Health: ID# VT-0282
Virgin Island/PADEP Certification
Virginia/VELAP Certification #: 9526
Washington Certification #: C868
West Virginia DEP Certification #: 143
West Virginia DHHR Certification #: 9964C
Wisconsin Approve List for Rad
Wyoming Certification #: 8TMS-L

REPORT OF LABORATORY ANALYSIS

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SAMPLE SUMMARY

Project: MCDONOUGH PIEZOMETERS RADS

Pace Project No.: 92560137

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92560137001	B-117D	Water	09/08/21 16:15	09/09/21 08:45
92560137002	B-118	Water	09/08/21 13:35	09/09/21 08:45
92560137003	B-119D	Water	09/08/21 15:17	09/09/21 08:45
92560137004	B-116D	Water	09/09/21 13:53	09/10/21 17:40

REPORT OF LABORATORY ANALYSIS

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SAMPLE ANALYTE COUNT

Project: MCDONOUGH PIEZOMETERS RADS

Pace Project No.: 92560137

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
92560137001	B-117D	EPA 9315	CLA	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92560137002	B-118	EPA 9315	CLA	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92560137003	B-119D	EPA 9315	CLA	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92560137004	B-116D	EPA 9315	SLC	1	PASI-PA
		EPA 9320	JC2	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA

PASI-PA = Pace Analytical Services - Greensburg

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: MCDONOUGH PIEZOMETERS RADS

Pace Project No.: 92560137

Sample: B-117D **Lab ID: 92560137001** Collected: 09/08/21 16:15 Received: 09/09/21 08:45 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	0.124 ± 0.226 (0.514) C:95% T:NA	pCi/L	10/06/21 12:02	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	0.571 ± 0.456 (0.906) C:67% T:87%	pCi/L	10/04/21 15:05	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	0.695 ± 0.682 (1.42)	pCi/L	10/07/21 15:34	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: MCDONOUGH PIEZOMETERS RADS

Pace Project No.: 92560137

Sample: B-118 **Lab ID: 92560137002** Collected: 09/08/21 13:35 Received: 09/09/21 08:45 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	-0.0218 ± 0.176 (0.498) C:96% T:NA	pCi/L	10/06/21 12:02	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	0.0324 ± 0.341 (0.790) C:65% T:94%	pCi/L	10/04/21 15:06	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	0.0324 ± 0.517 (1.29)	pCi/L	10/07/21 15:34	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: MCDONOUGH PIEZOMETERS RADS

Pace Project No.: 92560137

Sample: B-119D **Lab ID: 92560137003** Collected: 09/08/21 15:17 Received: 09/09/21 08:45 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	-0.0190 ± 0.153 (0.445) C:92% T:NA	pCi/L	10/06/21 12:02	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	0.168 ± 0.399 (0.887) C:67% T:88%	pCi/L	10/04/21 15:06	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	0.168 ± 0.552 (1.33)	pCi/L	10/07/21 15:34	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: MCDONOUGH PIEZOMETERS RADS

Pace Project No.: 92560137

Sample: B-116D **Lab ID: 92560137004** Collected: 09/09/21 13:53 Received: 09/10/21 17:40 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	0.388 ± 0.259 (0.447) C:100% T:NA	pCi/L	10/06/21 08:25	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	0.499 ± 0.409 (0.817) C:64% T:91%	pCi/L	10/04/21 14:59	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	0.887 ± 0.668 (1.26)	pCi/L	10/06/21 15:27	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL - RADIOCHEMISTRY

Project: MCDONOUGH PIEZOMETERS RADS

Pace Project No.: 92560137

QC Batch:	465345	Analysis Method:	EPA 9320
QC Batch Method:	EPA 9320	Analysis Description:	9320 Radium 228
		Laboratory:	Pace Analytical Services - Greensburg

Associated Lab Samples: 92560137001, 92560137002, 92560137003

METHOD BLANK: 2247073 Matrix: Water

Associated Lab Samples: 92560137001, 92560137002, 92560137003

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.306 ± 0.283 (0.572) C:72% T:95%	pCi/L	10/04/21 11:58	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL - RADIOCHEMISTRY

Project: MCDONOUGH PIEZOMETERS RADS

Pace Project No.: 92560137

QC Batch:	465347	Analysis Method:	EPA 9315
QC Batch Method:	EPA 9315	Analysis Description:	9315 Total Radium
		Laboratory:	Pace Analytical Services - Greensburg

Associated Lab Samples: 92560137001, 92560137002, 92560137003

METHOD BLANK: 2247077 Matrix: Water

Associated Lab Samples: 92560137001, 92560137002, 92560137003

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	-0.0279 ± 0.217 (0.589) C:92% T:NA	pCi/L	10/06/21 12:00	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL - RADIOCHEMISTRY

Project: MCDONOUGH PIEZOMETERS RADS

Pace Project No.: 92560137

QC Batch: 465343

Analysis Method: EPA 9320

QC Batch Method: EPA 9320

Analysis Description: 9320 Radium 228

Laboratory: Pace Analytical Services - Greensburg

Associated Lab Samples: 92560137004

METHOD BLANK: 2247069

Matrix: Water

Associated Lab Samples: 92560137004

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.209 ± 0.287 (0.612) C:69% T:89%	pCi/L	10/04/21 11:58	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL - RADIOCHEMISTRY

Project: MCDONOUGH PIEZOMETERS RADS

Pace Project No.: 92560137

QC Batch: 465344

Analysis Method: EPA 9315

QC Batch Method: EPA 9315

Analysis Description: 9315 Total Radium

Laboratory: Pace Analytical Services - Greensburg

Associated Lab Samples: 92560137004

METHOD BLANK: 2247072

Matrix: Water

Associated Lab Samples: 92560137004

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	0.00717 ± 0.168 (0.443) C:96% T:NA	pCi/L	10/06/21 08:19	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

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QUALIFIERS

Project: MCDONOUGH PIEZOMETERS RADS

Pace Project No.: 92560137

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

Acid preservation may not be appropriate for 2 Chloroethylvinyl ether.

A separate vial preserved to a pH of 4-5 is recommended in SW846 Chapter 4 for the analysis of Acrolein and Acrylonitrile by EPA Method 8260.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Reported results are not rounded until the final step prior to reporting. Therefore, calculated parameters that are typically reported as "Total" may vary slightly from the sum of the reported component parameters.

Act - Activity

Unc - Uncertainty: SDWA = 1.96 sigma count uncertainty, all other matrices = Expanded Uncertainty (95% confidence interval).

Gamma Spec = Expanded Uncertainty (95.4% Confidence Interval)

(MDC) - Minimum Detectable Concentration

Trac - Tracer Recovery (%)

Carr - Carrier Recovery (%)

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: MCDONOUGH PIEZOMETERS RADS
Pace Project No.: 92560137

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92560137001	B-117D	EPA 9315	465347		
92560137002	B-118	EPA 9315	465347		
92560137003	B-119D	EPA 9315	465347		
92560137004	B-116D	EPA 9315	465344		
92560137001	B-117D	EPA 9320	465345		
92560137002	B-118	EPA 9320	465345		
92560137003	B-119D	EPA 9320	465345		
92560137004	B-116D	EPA 9320	465343		
92560137001	B-117D	Total Radium Calculation	467213		
92560137002	B-118	Total Radium Calculation	467213		
92560137003	B-119D	Total Radium Calculation	467213		
92560137004	B-116D	Total Radium Calculation	467011		

REPORT OF LABORATORY ANALYSIS

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Laboratory receiving samples:

Asheville Eden Greenwood Huntersville Raleigh Mechanicsville Atlanta Kernersville

Sample Condition Upon Receipt

Client Name:

GA Power

Project #:

WO# : 92560137



Courier: Commercial Fed Ex UPS USPS Client Pace Other: _____

Custody Seal Present? Yes No Seals Intact? Yes No

Date/Initials Person Examining Contents: *9/1/24 CSW*

Packing Material: Bubble Wrap Bubble Bags None Other

Biological Tissue Frozen?

Thermometer: IR Gun ID: 214 Type of Ice: Wet Blue None

Yes No N/A

Cooler Temp: 2.6 Correction Factor: Add/Subtract (+0.1)

Temp should be above freezing to 6°C
 Samples out of temp criteria. Samples on ice, cooling process has begun

Cooler Temp Corrected (°C): 2.5

USDA Regulated Soil (N/A, water sample)
Did samples originate in a quarantine zone within the United States: CA, NY, or SC (check maps)? Yes No

Did samples originate from a foreign source (internationally, including Hawaii and Puerto Rico)? Yes No

			Comments/Discrepancy:
Chain of Custody Present?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	1.	
Samples Arrived within Hold Time?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	2.	
Short Hold Time Analysis (<72 hr.)?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	3.	
Rush Turn Around Time Requested?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	4.	
Sufficient Volume?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	5.	
Correct Containers Used?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	6.	
-Pace Containers Used?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A		
Containers Intact?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	7.	
Dissolved analysis: Samples Field Filtered?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	8.	
Sample Labels Match COC?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	9.	
-Includes Date/Time/ID/Analysis Matrix:	<i>W</i>		
Headspace in VOA Vials (>5-6mm)?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	10.	
Trip Blank Present?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	11.	
Trip Blank Custody Seals Present?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A		

COMMENTS/SAMPLE DISCREPANCY

Field Data Required? Yes No

Lot ID of split containers:

CLIENT NOTIFICATION/RESOLUTION

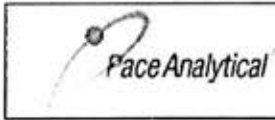
Person contacted: _____ Date/Time: _____

Project Manager SCURF Review: _____

Date: _____

Project Manager SRF Review: _____

Date: _____



Document Name:
Sample Condition Upon Receipt(SCUR)
 Document No.:
F-CAR-CS-033-Rev.07

Document Revised: October 28, 2020
 Page 2 of 2
 Issuing Authority:
 Pace Carolinas Quality Office

*Check mark top half of box if pH and/or dechlorination is verified and within the acceptance range for preservation samples.

Exceptions: VOA, Coliform, TOC, Oil and Grease, DRO/8015 (water) DOC, LLHG

**Bottom half of box is to list number of bottles

Project #

WO# : 92560137

PM: NMG

Due Date: 09/30/21

CLIENT: GA-GA Power

Item#	BP4U-125 mL Plastic Unpreserved (N/A) (Cl-)	BP3U-250 mL Plastic Unpreserved (N/A)	BP2U-500 mL Plastic Unpreserved (N/A)	BP1U-1 liter Plastic Unpreserved (N/A)	BP4S-125 mL Plastic H2SO4 (pH < 2) (Cl-)	BP3N-250 mL plastic HNO3 (pH < 2)	BP4Z-125 mL Plastic ZN Acetate & NaOH (>9)	BP4C-125 mL Plastic NaOH (pH > 12) (Cl-)	WGJU-Wide-mouthed Glass jar Unpreserved	AG1U-1 liter Amber Unpreserved (N/A) (Cl-)	AG1H-1 liter Amber HCl (pH < 2)	AG3U-250 mL Amber Unpreserved (N/A) (Cl-)	AG1S-1 liter Amber H2SO4 (pH < 2)	AG3S-250 mL Amber H2SO4 (pH < 2)	AG3A(DG3A)-250 mL Amber NH4Cl (N/A)(Cl-)	DG9H-40 mL VOA HCl (N/A)	VG9T-40 mL VOA Na2SO3 (N/A)	VG9U-40 mL VOA Unp (N/A)	DG9P-40 mL VOA H3PO4 (N/A)	VOAK (6 vials per kit)-S035 kit (N/A)	V/GK (3 vials per kit)-VPH/Gas kit (N/A)	SPST-125 mL Sterile Plastic (N/A - lab)	SP2T-250 mL Sterile Plastic (N/A - lab)	BP3A-250 mL Plastic (NH2)2SO4 (9.3-9.7)	AG0U-100 mL Amber Unpreserved vials (N/A)	VSGU-20 mL Scintillation vials (N/A)	DG9U-40 mL Amber Unpreserved vials (N/A)	
1		✓	✓			✓																						
2		✓	✓			✓																						
3		✓	✓			✓																						
4																												
5																												
6																												
7																												
8																												
9																												
10																												
11																												
12																												

pH Adjustment Log for Preserved Samples

Sample ID	Type of Preservative	pH upon receipt	Date preservation adjusted	Time preservation adjusted	Amount of Preservative added	Lot #

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. Out of hold, incorrect preservative, out of temp, incorrect containers.



CHAIN-OF-CUSTODY / Analytical Request Document
 The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Section A
 Client Information: Georgia Power - Coal Combustion Residuals
 2460 Miller Road
 Atlanta, GA 30339
 Fax: (404) 506-1236
 E-mail: jacobson@gecorporate.com

Section B
 Required Project Information: Report To: Jhu Abraham
 Copy To: Odeur
 Project Name: Plant McClellan/Parsons
 Project # : 160849231

Section C
 Invoice Information: Company Name: Kaminco@gecorporate.com
 Address: 10 Day TAT
 Project Manager: Kevin Herring
 Pico Profile #:
 State / Location: GA

LINE #	MANTOX Coring Water Water Wash Water Residuals CI WPS AF Other Thru	CODE DW WT YW R CL WP AF OT TS	MAINT CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	DATE	TIME	SAMPLE TEMP AT COLLECTION	PRESERVATIVES						ANALYSIS TEST	Residual Chlorine (Y/N)	pH = 6.00			
								# OF CONTAINERS	Unpreserved - Ice	H2SO4	HNO3 + Ice	HCl	NaOH + Zn Acetate				Na2S2O3	Methanol	Other
1				G	9/9/21	16:15		5	2	3									
2				G	9/9/21	13:35		5	2	3									
3				G	9/9/21	15:17		5	2	3									
4																			
5																			
6																			
7																			
8																			
9																			
10																			
11																			
12																			
13																			
14																			

ADDITIONAL COMMENTS: SW/Sample 9/9/21 8:11 J.E.VOC
 RELINQUISHED BY / AFFILIATION: J.E.VOC 9-9-21 8:15
 ACCEPTED BY / AFFILIATION: J.E.VOC 9/9/21 8:10
 DATE: 9/9/21

TEMP in C: _____
 Received on Ice (Y/N): _____
 Custody Sealed Cooler (Y/N): _____
 Samples Intact (Y/N): _____

Joe Magovernack J.E.VOC DATE Signed: 9/9/21



Document Name:
Sample Condition Upon Receipt (SCUR)
 Document No.:
F-CAR-CS-033-Rev.07

Document Revised: October 28, 2020
 Page 1 of 2
 Issuing Authority:
 Pace Carolinas Quality Office

Laboratory receiving samples:

Asheville Eden Greenwood Huntersville Raleigh Mechanicsville Atlanta Kernersville

Sample Condition Upon Receipt

Client Name:

Georgia Power

Project #:

Courier: Fed Ex UPS USPS Client
 Commercial Pace Other: _____

Custody Seal Present? Yes No Seals Intact? Yes No

Date/Initials Person Examining Contents: MT 9/10/21

Packing Material: Bubble Wrap Bubble Bags None Other

Biological Tissue Frozen?

Yes No N/A

Thermometer:

IR Gun ID: 230

Type of Ice:

Wet Blue None

Cooler Temp: 3.4

Correction Factor:
 Add/Subtract (°C) ± 0.1

Temp should be above freezing to 6°C

Samples out of temp criteria. Samples on ice, cooling process has begun

Cooler Temp Corrected (°C): 3.5

USDA Regulated Soil (N/A, water sample)

Did samples originate in a quarantine zone within the United States: CA, NY, or SC (check maps)?

Yes No

Did samples originate from a foreign source (internationally, including Hawaii and Puerto Rico)? Yes No

	Comments/Discrepancy:
Chain of Custody Present? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	1.
Samples Arrived within Hold Time? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	2.
Short Hold Time Analysis (<72 hr.)? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	3.
Rush Turn Around Time Requested? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	4.
Sufficient Volume? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	5.
Correct Containers Used? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	6.
-Pace Containers Used? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Containers intact? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	7.
Dissolved analysis: Samples Field Filtered? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	8.
Sample Labels Match COC? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	9.
-Includes Date/Time/ID/Analysis Matrix: <u>WT</u>	
Headspace in VOA Vials (>5-6mm)? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	10.
Trip Blank Present? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	11.
Trip Blank Custody Seals Present? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	

COMMENTS/SAMPLE DISCREPANCY

Field Data Required? Yes No

Lot ID of split containers:

CLIENT NOTIFICATION/RESOLUTION

Person contacted: _____ Date/Time: _____

Project Manager SCURF Review: _____

Date: _____

Project Manager SRF Review: _____

Date: _____



Document Name:
 Sample Condition Upon Receipt(SCUR)
 Document No.:
 F-CAR-CS-033-Rev.07

Document Revised: October 28, 2020
 Page 2 of 2
 Issuing Authority:
 Pace Carolinas Quality Office

*Check mark top half of box if pH and/or dechlorination is verified and within the acceptance range for preservation samples.

Project #

Exceptions: VDA, Coliform, TOC, Oil and Grease, DRO/8015 (water) DOC, LLHg

**Bottom half of box is to list number of bottles

Item#	BP4U-125 mL Plastic Unpreserved (N/A) (Cl-)	BP2U-250 mL Plastic Unpreserved (N/A)	BP2U-500 mL Plastic Unpreserved (N/A)	BP1U-1 liter Plastic Unpreserved (N/A)	BP4S-125 mL Plastic H2SO4 (pH < 2) (Cl-)	BP3N-250 mL plastic HNO3 (pH < 2)	BP4Z-125 mL Plastic Zn Acetate & NaOH (>9)	BP4C-125 mL Plastic NaOH (pH > 12) (Cl-)	WGFLU-Wide-mouthed Glass Jar Unpreserved	AG1U-1 liter Amber Unpreserved (N/A) (Cl-)	AG1H-1 liter Amber HCl (pH < 2)	AG3U-250 mL Amber Unpreserved (N/A) (Cl-)	AG1S-1 liter Amber H2SO4 (pH < 2)	AG3S-250 mL Amber H2SO4 (pH < 2)	AG3A(DG3A)-250 mL Amber NH4Cl (N/A)(Cl-)	DG9H-40 mL VDA HCl (N/A)	VG9T-40 mL VDA Na2S2O3 (N/A)	VG9U-40 mL VOA Unp (N/A)	DG9P-40 mL VOA H3PO4 (N/A)	VOAK (6 vials per kit)-5035 kit (N/A)	V/GK (3 vials per kit)-VPH/Gas kit (N/A)	SP5T-125 mL Sterile Plastic (N/A - lab)	SP2T-250 mL Sterile Plastic (N/A - lab)	BP3A-250 mL Plastic (NH2)2SO4 (9.3-9.7)	AG6U-100 mL Amber Unpreserved vials (N/A)	VG6U-20 mL Sanitillation vials (N/A)	DG9U-40 mL Amber Unpreserved vials (N/A)		
1																													
2																													
3																													
4																													
5																													
6																													
7																													
8																													
9																													
10																													
11																													
12																													

pH Adjustment Log for Preserved Samples

Sample ID	Type of Preservative	pH upon receipt	Date preservation adjusted	Time preservation adjusted	Amount of Preservative added	Lot #

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. Out of hold, incorrect preservative, out of temp, incorrect containers.



CHAIN-OF-CUSTODY / Analytical Request Document
 The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Section A Required Client Information: Section B Required Project Information: Section C Analytical Information:

Company: Georgia Power - Coal Combustion Residuals
 Address: 2480 Manor Road
 Atlanta, GA 30339
 Email: jordanm@gepower.com
 Phone: (404) 596-7239
 Fax: (404) 596-7239
 Requested Date Date: 10 Day TAT

Requester: Joe Nathan
 Copy To: David
 Project Name: Plant McDonough Parameters
 Project # 19594021

Company Name: Kameron
 Address: 1200 Peachtree St NE
 Atlanta, GA 30309
 Project Manager: Kevin Henry

Regulatory Agency: EPA
 Site Location: GA

ITEM #	MATRIX	CONCENTRATION	DATE	TIME	ANALYSES TEST	Y/N	RESIDUAL CHLORINE (Y/N)
1	B-1160		9/10/21	13:53	Aspirin Total Metals Cl F, SO4, TDS Radium 226/228	X X X	pH = 6.02
2							
3							
4							
5							
6							
7							
8							
9							
10							
11							
12							
13							

ACQUIRED BY / AFFILIATION: *W. Bank* DATE: *9/10/21* TIME: *17:50*

ACQUIRED BY / AFFILIATION: *Chris Lee Hank* DATE: *9/10/21* TIME: *17:48*

TEMP °C: _____

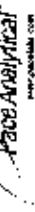
Received or Ice (Y/N): _____

Cooling Sealed Cooler (Y/N): _____

Sample Intact (Y/N): _____

Jude Wagnerspack DATE SIGNED: *9/10/21*

Quality Control Sample Performance Assessment



Analyst Must Manually Enter All Fields Highlighted in Yellow.

Test: **Re-228**
 Analyst: **JC2**
 Date: **10/17/2021**
 Worksheet: **62848**
 Matrix: **WI**

Method Blank Assessment	
MB Sample ID	2247069
MB Concentration:	0.208
MB 2 Sigma CSU:	0.287
MB MDC:	0.612
MB Numerical Performance Indicator	1.43
MB Status vs Numerical Indicator:	Pass
MB Status vs MDC:	Pass

Laboratory Control Sample Assessment	LCS# (Y or N/P)	
	LCS#2848	LCS#2848
Count Data	10/4/2021	10/4/2021
Decay Corrected Spike Concentration (pCi/mL)	21.029	21.029
Volume Used (mL)	37.973	37.973
Aliquot Volume (L, g, F)	0.10	0.10
Target Conc (pCi/L, g, F)	0.807	0.812
Uncertainty (Calculated)	4.703	4.876
Result (pCi/L, g, F)	0.236	0.229
LC50/CSU 2 Sigma CSU (pCi/L, g, F)	3.772	4.931
Numerical Performance Indicator	0.892	1.094
Percent Recovery	-1.98	0.45
Status vs Numerical Indicator	80.20%	105.45%
Status vs Recovery	Pass	Pass
Upper % Recovery Limit:	135%	135%
Lower % Recovery Limit:	60%	60%

Duplicate Sample Assessment	LCS#2848	LCS#2848
Sample ID:	LCS#2848	LCS#2848
Duplicate Sample ID:	3772	3772
Sample Result (pCi/L, g, F):	0.892	0.892
Sample Duplicate Result (pCi/L, g, F):	4.931	4.931
Sample Duplicate Result 2 Sigma CSU (pCi/L, g, F):	1.094	1.094
Are sample and/or duplicate results below RL?	NO	NO
Duplicate Numerical Performance Indicator:	-1.609	-1.609
(Based on the LCS/CSU Percent Recoveries) Duplicate RPD:	27.20%	27.20%
Duplicate Status vs Numerical Indicator:	Pass	Pass
Duplicate Status vs RPD:	Pass	Pass
% RPD Limit:	36%	36%

Evaluation of duplicate precision is not applicable if either the sample or duplicate results are below the MDC.

Comments:

Sample Matrix Spike Control Assessment	MS/MSD 1	MS/MSD 2
Sample Collection Date		
Sample ID		
Sample MS ID		
Sample MSD ID		
Spike ID		
MS/MSD Decay Corrected Spike Concentration (pCi/mL)		
Spike Volume Used in MS (mL):		
MS Aliquot (L, g, F):		
MS Target Conc (pCi/L, g, F):		
MSD Aliquot (L, g, F):		
MSD Target Conc (pCi/L, g, F):		
MS Spike Uncertainty (Calculated):		
MSD Spike Uncertainty (Calculated):		
Sample Result 2 Sigma CSU (pCi/L, g, F):		
Sample Matrix Spike Result:		
Matrix Spike Result 2 Sigma CSU (pCi/L, g, F):		
Sample Matrix Spike Duplicate Result:		
Matrix Spike Duplicate Result 2 Sigma CSU (pCi/L, g, F):		
MS Numerical Performance Indicator:		
MSD Numerical Performance Indicator:		
MS Percent Recovery:		
MSD Percent Recovery:		
MS Status vs Numerical Indicator:		
MSD Status vs Numerical Indicator:		
MS Status vs Recovery:		
MSD Status vs Recovery:		
MS/MSD Upper % Recovery Limit:		
MS/MSD Lower % Recovery Limit:		

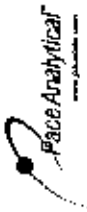
Matrix Spike/Matrix Spike Duplicate Sample Assessment
Sample ID:
Sample MS ID:
Sample MSD ID:
Sample Matrix Spike Result:
Matrix Spike Result 2 Sigma CSU (pCi/L, g, F):
Sample Matrix Spike Duplicate Result:
Sample Matrix Spike Duplicate Result 2 Sigma CSU (pCi/L, g, F):
Duplicate Numerical Performance Indicator:
(Based on the Percent Recoveries) MS/MSD Duplicate RPD:
MS/MSD Duplicate Status vs Numerical Indicator:
MS/MSD Duplicate Status vs RPD:
% RPD Limit:

10/10/21
 JC2

Quality Control Sample Performance Assessment

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Test: Ra-228
 Analysis: VAL
 Date: 10/11/2021
 Worksheet: 62850
 Matrix: WWT



Method Blank Assessment

MB Sample ID	2247073
MB Concentration	0.306
MB 2 Sigma CSU	0.283
MB MDC	0.572
MB Numerical Performance Indicator	2.12
MB Status vs Numerical Indicator	Warning
MB Status vs MDC	Pass

Laboratory Control Sample Assessment

Count Data Spike I.D.	Y
10/4/2021	LCS062850
21-029	37.973
0.10	0.10
0.805	0.816
4.716	4.653
0.231	0.228
5.361	4.280
1.173	0.992
1.06	-0.72
113.68%	91.98%
N/A	N/A
Pass	Pass
135%	135%
60%	60%

Duplicate Sample Assessment

Sample I.D.	Duplicate Sample I.D.	Sample Result (pCtL, g, F)	Duplicate Result (pCtL, g, F)	Sample Duplicate Result (pCtL, g, F)	Sample Duplicate Result 2 Sigma CSU (pCtL, g, F)	Are sample and/or duplicate results below RL?	Duplicate Numerical Performance Indicator	Duplicate Status vs Numerical Indicator	Duplicate Status vs RPD	% RPD Limit
LCS02850	LCS062850	5.361	1.173	4.280	0.992	NO	1.380	21.11%	Pass	35%

[Handwritten signature]

* Evaluation of duplicate precision is not applicable if either the sample or duplicate results are below the MDC.

Comments:

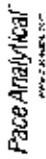
*RELATIO
CMA*

Sample Matrix Spike Control Assessment	MS/MSD 1	MS/MSD 2
Sample Collection Date: Sample I.D.: Sample MS I.D.: Sample MSD I.D.: Spike I.D.: Spike Volume Used in MS (mL): Spike Volume Used in MSD (mL): MS Aliquot (L, Q, F): MS Target Conc. (pCtL, g, F): MSD Aliquot (L, Q, F): MSD Target Conc. (pCtL, g, F): MS Spike Uncertainty (calculated): MSD Spike Uncertainty (calculated): Sample Result 2 Sigma CSU (pCtL, g, F): Sample Mean Spike Result: Matrix Spike Result 2 Sigma CSU (pCtL, g, F): Sample Matrix Spike Duplicate Result: Matrix Spike Duplicate Result 2 Sigma CSU (pCtL, g, F): MS Numerical Performance Indicator: MSD Numerical Performance Indicator: MS Percent Recovery: MSD Percent Recovery: MS Status vs Numerical Indicator: MSD Status vs Numerical Indicator: MS Status vs Recovery: MSD Status vs Recovery: MS/MSD Upper % Recovery Limit: MS/MSD Lower % Recovery Limit:		

Matrix Spike/Matrix Spike Duplicate Sample Assessment

Sample I.D.	Sample MS I.D.	Sample MSD I.D.	Matrix Spike Result 2 Sigma CSU (pCtL, g, F)	Sample Matrix Spike Duplicate Result	Sample Matrix Spike Duplicate Result 2 Sigma CSU (pCtL, g, F)	Duplicate Numerical Performance Indicator	MS/MSD Duplicate Status vs Numerical Indicator	MS/MSD Duplicate Status vs RPD	% RPD Limit

Quality Control Sample Performance Assessment



Analyst Must Manually Enter All Fields Highlighted in Yellow

Test: Ra-226
Analyst: SLC
Date: 9/28/2021
Worksheet: 62849
Matrix: DW

Method Blank Assessment	MS/MSD 1	MS/MSD 2
MB Sample ID: 224-012 MB Concentration: 0.007 MB Counting Uncertainty: 0.168 MB MDC: 0.443 MB Numerical Performance Indicator: 0.08 MB Status vs Numerical Indicator: N/A MB Status vs MDC: Pass		

Laboratory Control Sample Assessment	LCS/D (Y or N) ?	
	LCS062849	LCS062849
Count Date: 10/6/2021	Y	Y
Decay Corrected Spike Concentration (pCi/mL): 18-033	19-033	19-033
Volume Used (mL): 24.033	24.033	24.033
Aliquot Volume (L, g, F): 0.10	0.10	0.10
Target Conc (pCi/L, g, F): 0.503	0.503	0.503
Uncertainty (Calculated): 4.779	4.791	4.791
Result (pCi/L, g, F): 0.057	0.067	0.067
LCS/LCSD Counting Uncertainty (pCi/L, g, F): 5.249	5.218	5.218
Numerical Performance Indicator: 0.891	0.720	0.720
Percent Recovery: 1.33	1.16	1.16
Status vs Numerical Indicator: 108.93%	N/A	N/A
Upper % Recovery Limits: Pass	Pass	Pass
Lower % Recovery Limits: 75%	75%	75%

Duplicate Sample Assessment	LCS/D (Y or N) ?	
	LCS062849	LCS062849
Sample ID: 92560766017	92560766017	92560766017
Duplicate Sample ID: 92560766017	92560766017	92560766017
Sample Result (pCi/L, g, F): 0.363	0.363	0.363
Sample Result Counting Uncertainty (pCi/L, g, F): 0.277	0.277	0.277
Sample Duplicate Result (pCi/L, g, F): 0.174	0.174	0.174
Sample Duplicate Result Counting Uncertainty (pCi/L, g, F): 0.199	0.199	0.199
Are sample and/or duplicate results below RL? NO	NO	NO
Duplicate Numerical Performance Indicator: 0.680	0.680	0.680
(Based on the LCS/LCSD Percent Recoveries) Duplicate IIR: 0.82%	0.82%	0.82%
Duplicate Status vs Numerical Indicator: N/A	N/A	N/A
Duplicate Status vs RPD: Pass	Pass	Pass
% RPD Limit: 25%	25%	25%

*** Evaluation of duplicate precision is not applicable if either the sample or duplicate results are below the MDC

Comments:

... Results are not reportable due to unacceptable precision N/A

Sample Matrix Spike Control Assessment	MS/MSD 1	MS/MSD 2
Sample Collection Date: Sample ID: Sample MS ID: Sample MSD ID: Spike I.D.: MS/MSD Decay Carried Spike Concentration (pCi/mL): Spike Volume Used in MS (mL): Spike Volume Used in MSD (mL): MS Aliquot (L, g, F): MS Target Conc (pCi/L, g, F): MSD Aliquot (L, g, F): MS Spike Uncertainty (Calculated): MS Spike Uncertainty (Calculated): MSD Spike Uncertainty (Calculated): Sample Result: Sample Result Counting Uncertainty (pCi/L, g, F): Sample Matrix Spike Result: Sample Matrix Spike Result Counting Uncertainty (pCi/L, g, F): Matrix Spike Duplicate Result Counting Uncertainty (pCi/L, g, F): Matrix Spike Duplicate Result Counting Uncertainty (pCi/L, g, F): MS Numerical Performance Indicator: MSD Numerical Performance Indicator: MS Percent Recovery: MSD Percent Recovery: MS Status vs Numerical Indicator: MSD Status vs Numerical Indicator: MS Status vs Recovery: MSD Status vs Recovery: MS/MSD Upper % Recovery Limit: MS/MSD Lower % Recovery Limit:		

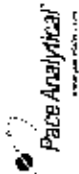
Matrix Spike/Matrix Spike Duplicate Sample Assessment
Sample ID: Sample MS ID: Sample MSD ID: Matrix Spike Result Counting Uncertainty (pCi/L, g, F): Sample Matrix Spike Result: Sample Matrix Spike Duplicate Result: Matrix Spike Duplicate Result Counting Uncertainty (pCi/L, g, F): Duplicate Numerical Performance Indicator: Duplicate Numerical Performance Indicator (Based on the Percent Recoveries): MS/MSD Duplicate RPD: MS/MSD Duplicate Status vs Numerical Indicator: MS/MSD Duplicate Status vs RPD: % RPD Limit:

17/10/2021
12/10/21

Quality Control Sample Performance Assessment

Analyst *Must Manually Enter All Fields Highlighted in Yellow.*

Test: Ra-226
Analyst: CLA
Date: 9/28/2021
Worksheet: 62851
Matrix: DW



Method Blank Assessment	MB Sample ID: 224-10/77
	MB Concentration: -0.028
	MFR Counting Uncertainty: 0.217
	MB MDC: 0.589
MB Numerical Performance Indicator:	-0.25
MB Status vs Numerical Indicator:	N/A
MB Status vs MDC:	Pass

Laboratory Control Sample Assessment	LCS ID or #17		Y
	LCS062851	LCS062851	
Count Date:	10/7/2021	10/7/2021	
Spike I.D.:	19-033	19-033	
Decay Corrected Spike Concentration (pCi/ml):	24.033	24.033	
Volume Used (mL):	0.10	0.10	
Aliquot Volume (L, g, F):	0.508	0.508	
Target Conc. (pCi/L, g, F):	4.792	4.734	
Uncertainty (Calculated):	0.058	0.067	
Result (pCi/L, g, F):	4.037	4.418	
LCS01 CSO Counting Uncertainty (pCi/L, g, F):	0.623	0.646	
Numerical Performance Indicator:	-2.37	-0.95	
Percent Recovery:	84.25%	93.33%	
Status vs Numerical Indicator:	N/A	N/A	
Status vs Recovery:	Pass	Pass	
Upper % Recovery Limits:	125%	125%	
Lower % Recovery Limits:	75%	75%	

Duplicate Sample Assessment	LCS ID or #17		Y
	LCS062851	LCS062851	
Sample I.D.:	92960766014	92960766014	
Duplicate Sample I.D.:	92560765014DUP	92560765014DUP	
Sample Result (pCi/L, g, F):	4.037	0.428	
Sample Result Counting Uncertainty (pCi/L, g, F):	0.623	0.225	
Sample Duplicate Result (pCi/L, g, F):	4.418	0.178	
Sample Duplicate Result Counting Uncertainty (pCi/L, g, F):	0.646	0.185	
Ave sample and/or duplicate results below RL?	NO	See Below	
Duplicate Numerical Performance Indicator:	-0.832	1.678 OK	
(Based on the LCS01 CSO Percent Recovery) Duplicate RPD:	10.22%	82.99%	
Duplicate Status vs Numerical Indicator:	N/A	N/A	
Duplicate Status vs RPD:	Pass	Fail**	
% RPD Limit:	25%	25%	

** Evaluation of duplicate precision & not applicable if either the sample or duplicate results are below the MDC.

Comments:

L-MSDS N/A

*** Right click on spreadsheet to see all data ***

10/27/21
DW

Sample Matrix Spike Control Assessment	MSMSD 1	MSMSD 2
<p>Sample Collection Date:</p> <p>Sample I.D.:</p> <p>Sample MS I.D.:</p> <p>Sample MS2 I.D.:</p> <p>Spike I.D.:</p> <p>MSMSD Decay Corrected Spike Concentration (pCi/ml):</p> <p>Spike Volume Used in MS (mL):</p> <p>Spike Volume Used in MSD (mL):</p> <p>MS Aliquot (L, g, F):</p> <p>MSD Aliquot (L, g, F):</p> <p>MSD Target Conc (pCi/L, g, F):</p> <p>MS Spike Uncertainty (Calculated):</p> <p>MSD Spike Uncertainty (Calculated):</p>	<p>Sample Result:</p> <p>Sample Matrix Spike Result:</p> <p>Matrix Spike Result Counting Uncertainty (pCi/L, g, F):</p> <p>Sample Matrix Spike Duplicate Result:</p> <p>Matrix Spike Duplicate Result Counting Uncertainty (pCi/L, g, F):</p> <p>MS Numerical Performance Indicator:</p> <p>MSD Numerical Performance Indicator:</p> <p>MS Percent Recovery:</p> <p>MSD Percent Recovery:</p> <p>MS Status vs Numerical Indicator:</p> <p>MSD Status vs Numerical Indicator:</p> <p>MSMSD Upper % Recovery Limits:</p> <p>MSMSD Lower % Recovery Limits:</p>	

Matrix Spike/Matrix Spike Duplicate Sample Assessment
<p>Sample I.D.:</p> <p>Sample MS I.D.:</p> <p>Sample MS2 I.D.:</p> <p>Matrix Spike Result Counting Uncertainty (pCi/L, g, F):</p> <p>Sample Matrix Spike Duplicate Result:</p> <p>Matrix Spike Duplicate Result Counting Uncertainty (pCi/L, g, F):</p> <p>Duplicate Numerical Performance Indicator:</p> <p>(Based on the Percent Recovery) MS: MSD Duplicate RPD:</p> <p>MS: MSD Duplicate Status vs Numerical Indicator:</p> <p>MS: MSD Duplicate Status vs RPD:</p> <p>% RPD Limit:</p>

LAM 10/17/21

September 14, 2021

Kelley Sharpe
ARCADIS - Atlanta
2839 Paces Ferry Rd
STE 900
Atlanta, GA 30339

RE: Project: Plant McDonough CCR-Ash Pond
Pace Project No.: 92559814

Dear Kelley Sharpe:

Enclosed are the analytical results for sample(s) received by the laboratory on September 08, 2021. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

- Pace Analytical Services - Asheville
- Pace Analytical Services - Peachtree Corners, GA

If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Maiya Parks
maiya.parks@pacelabs.com
(770)734-4200
Project Manager

Enclosures

cc: Joju Abraham, Georgia Power-CCR
Ben Hodges, Georgia Power
Warren Johnson, ARCADIS - Atlanta



REPORT OF LABORATORY ANALYSIS

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CERTIFICATIONS

Project: Plant McDonough CCR-Ash Pond

Pace Project No.: 92559814

Pace Analytical Services Asheville

2225 Riverside Drive, Asheville, NC 28804

Florida/NELAP Certification #: E87648

North Carolina Drinking Water Certification #: 37712

North Carolina Wastewater Certification #: 40

South Carolina Certification #: 99030001

Virginia/VELAP Certification #: 460222

Pace Analytical Services Peachtree Corners

110 Technology Pkwy, Peachtree Corners, GA 30092

Florida DOH Certification #: E87315

Georgia DW Inorganics Certification #: 812

North Carolina Certification #: 381

South Carolina Certification #: 98011001

REPORT OF LABORATORY ANALYSIS

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SAMPLE SUMMARY

Project: Plant McDonough CCR-Ash Pond

Pace Project No.: 92559814

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92559814001	UT-1_US	Water	09/07/21 17:00	09/08/21 12:45
92559814002	UT02	Water	09/07/21 16:52	09/08/21 12:45
92559814003	UT03	Water	09/07/21 16:44	09/08/21 12:45
92559814004	UT01_DS	Water	09/07/21 16:33	09/08/21 12:45

REPORT OF LABORATORY ANALYSIS

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SAMPLE ANALYTE COUNT

Project: Plant McDonough CCR-Ash Pond

Pace Project No.: 92559814

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
92559814001	UT-1_US	EPA 6010D	DRB	4	PASI-GA
		EPA 6020B	CW1	3	PASI-GA
		SM 2540C-2011	ALW	1	PASI-GA
		SM 2320B-2011	ECH	2	PASI-A
		EPA 300.0 Rev 2.1 1993	CDC	3	PASI-A
92559814002	UT02	EPA 6010D	DRB	4	PASI-GA
		EPA 6020B	CW1	2	PASI-GA
		SM 2540C-2011	ALW	1	PASI-GA
		SM 2320B-2011	ECH	2	PASI-A
		EPA 300.0 Rev 2.1 1993	CDC	3	PASI-A
92559814003	UT03	EPA 6010D	DRB	4	PASI-GA
		EPA 6020B	CW1	3	PASI-GA
		SM 2540C-2011	ALW	1	PASI-GA
		SM 2320B-2011	ECH	2	PASI-A
		EPA 300.0 Rev 2.1 1993	CDC	3	PASI-A
92559814004	UT01_DS	EPA 6010D	DRB	4	PASI-GA
		EPA 6020B	CW1	3	PASI-GA
		SM 2540C-2011	ALW	1	PASI-GA
		SM 2320B-2011	ECH	2	PASI-A
		EPA 300.0 Rev 2.1 1993	CDC	3	PASI-A

PASI-A = Pace Analytical Services - Asheville

PASI-GA = Pace Analytical Services - Peachtree Corners, GA

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Plant McDonough CCR-Ash Pond
Pace Project No.: 92559814

Sample: UT-1_US		Lab ID: 92559814001	Collected: 09/07/21 17:00	Received: 09/08/21 12:45	Matrix: Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010D ATL ICP		Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA						
Potassium	3.2	mg/L	0.20	1	09/09/21 11:55	09/09/21 18:36	7440-09-7	
Sodium	13.3	mg/L	1.0	1	09/09/21 11:55	09/09/21 18:36	7440-23-5	
Calcium	16.3	mg/L	1.0	1	09/09/21 11:55	09/09/21 18:36	7440-70-2	
Magnesium	3.3	mg/L	0.050	1	09/09/21 11:55	09/09/21 18:36	7439-95-4	
6020 MET ICPMS		Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA						
Arsenic	ND	mg/L	0.0050	1	09/09/21 11:50	09/09/21 21:50	7440-38-2	
Boron	0.041	mg/L	0.040	1	09/09/21 11:50	09/09/21 21:50	7440-42-8	
Molybdenum	ND	mg/L	0.010	1	09/09/21 11:50	09/09/21 21:50	7439-98-7	
2540C Total Dissolved Solids		Analytical Method: SM 2540C-2011 Pace Analytical Services - Peachtree Corners, GA						
Total Dissolved Solids	117	mg/L	10.0	1		09/09/21 19:53		
2320B Alkalinity		Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville						
Alkalinity, Bicarbonate (CaCO ₃)	60.1	mg/L	5.0	1		09/10/21 14:05		
Alkalinity, Total as CaCO ₃	60.1	mg/L	5.0	1		09/10/21 14:05		
300.0 IC Anions 28 Days		Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville						
Chloride	13.3	mg/L	1.0	1		09/09/21 19:48	16887-00-6	
Fluoride	0.34	mg/L	0.10	1		09/09/21 19:48	16984-48-8	
Sulfate	13.2	mg/L	1.0	1		09/09/21 19:48	14808-79-8	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Plant McDonough CCR-Ash Pond

Pace Project No.: 92559814

Sample: UT02	Lab ID: 92559814002	Collected: 09/07/21 16:52		Received: 09/08/21 12:45		Matrix: Water		
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010D ATL ICP								
Analytical Method: EPA 6010D Preparation Method: EPA 3010A								
Pace Analytical Services - Peachtree Corners, GA								
Potassium	3.2	mg/L	0.20	1	09/09/21 11:55	09/09/21 18:41	7440-09-7	
Sodium	13.4	mg/L	1.0	1	09/09/21 11:55	09/09/21 18:41	7440-23-5	
Calcium	17.3	mg/L	1.0	1	09/09/21 11:55	09/09/21 18:41	7440-70-2	
Magnesium	3.6	mg/L	0.050	1	09/09/21 11:55	09/09/21 18:41	7439-95-4	
6020 MET ICPMS								
Analytical Method: EPA 6020B Preparation Method: EPA 3005A								
Pace Analytical Services - Peachtree Corners, GA								
Arsenic	ND	mg/L	0.0050	1	09/09/21 11:50	09/09/21 21:56	7440-38-2	
Boron	0.081	mg/L	0.040	1	09/09/21 11:50	09/09/21 21:56	7440-42-8	
2540C Total Dissolved Solids								
Analytical Method: SM 2540C-2011								
Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	120	mg/L	10.0	1		09/09/21 19:53		
2320B Alkalinity								
Analytical Method: SM 2320B-2011								
Pace Analytical Services - Asheville								
Alkalinity, Bicarbonate (CaCO ₃)	62.5	mg/L	5.0	1		09/10/21 15:14		
Alkalinity, Total as CaCO ₃	62.5	mg/L	5.0	1		09/10/21 15:14		
300.0 IC Anions 28 Days								
Analytical Method: EPA 300.0 Rev 2.1 1993								
Pace Analytical Services - Asheville								
Chloride	13.1	mg/L	1.0	1		09/09/21 21:24	16887-00-6	
Fluoride	0.32	mg/L	0.10	1		09/09/21 21:24	16984-48-8	
Sulfate	15.2	mg/L	1.0	1		09/09/21 21:24	14808-79-8	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Plant McDonough CCR-Ash Pond
Pace Project No.: 92559814

Sample: UT03		Lab ID: 92559814003		Collected: 09/07/21 16:44	Received: 09/08/21 12:45	Matrix: Water		
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010D ATL ICP		Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA						
Potassium	3.2	mg/L	0.20	1	09/09/21 11:55	09/09/21 18:55	7440-09-7	
Sodium	13.2	mg/L	1.0	1	09/09/21 11:55	09/09/21 18:55	7440-23-5	
Calcium	17.4	mg/L	1.0	1	09/09/21 11:55	09/09/21 18:55	7440-70-2	
Magnesium	3.5	mg/L	0.050	1	09/09/21 11:55	09/09/21 18:55	7439-95-4	
6020 MET ICPMS		Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA						
Arsenic	ND	mg/L	0.0050	1	09/09/21 11:50	09/09/21 22:01	7440-38-2	
Boron	0.088	mg/L	0.040	1	09/09/21 11:50	09/09/21 22:01	7440-42-8	
Molybdenum	ND	mg/L	0.010	1	09/09/21 11:50	09/09/21 22:01	7439-98-7	
2540C Total Dissolved Solids		Analytical Method: SM 2540C-2011 Pace Analytical Services - Peachtree Corners, GA						
Total Dissolved Solids	72.0	mg/L	10.0	1		09/09/21 19:53		
2320B Alkalinity		Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville						
Alkalinity, Bicarbonate (CaCO ₃)	60.6	mg/L	5.0	1		09/10/21 15:21		
Alkalinity, Total as CaCO ₃	60.6	mg/L	5.0	1		09/10/21 15:21		
300.0 IC Anions 28 Days		Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville						
Chloride	12.9	mg/L	1.0	1		09/09/21 21:44	16887-00-6	
Fluoride	0.32	mg/L	0.10	1		09/09/21 21:44	16984-48-8	
Sulfate	15.1	mg/L	1.0	1		09/09/21 21:44	14808-79-8	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Plant McDonough CCR-Ash Pond
Pace Project No.: 92559814

Sample: UT01_DS	Lab ID: 92559814004	Collected: 09/07/21 16:33	Received: 09/08/21 12:45	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010D ATL ICP								
Analytical Method: EPA 6010D Preparation Method: EPA 3010A								
Pace Analytical Services - Peachtree Corners, GA								
Potassium	3.5	mg/L	0.20	1	09/09/21 11:55	09/09/21 19:00	7440-09-7	
Sodium	13.4	mg/L	1.0	1	09/09/21 11:55	09/09/21 19:00	7440-23-5	
Calcium	18.5	mg/L	1.0	1	09/09/21 11:55	09/09/21 19:00	7440-70-2	
Magnesium	3.9	mg/L	0.050	1	09/09/21 11:55	09/09/21 19:00	7439-95-4	
6020 MET ICPMS								
Analytical Method: EPA 6020B Preparation Method: EPA 3005A								
Pace Analytical Services - Peachtree Corners, GA								
Arsenic	ND	mg/L	0.0050	1	09/09/21 11:50	09/09/21 22:07	7440-38-2	
Boron	0.13	mg/L	0.040	1	09/09/21 11:50	09/09/21 22:07	7440-42-8	
Molybdenum	ND	mg/L	0.010	1	09/09/21 11:50	09/09/21 22:07	7439-98-7	
2540C Total Dissolved Solids								
Analytical Method: SM 2540C-2011								
Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	130	mg/L	10.0	1		09/09/21 19:53		
2320B Alkalinity								
Analytical Method: SM 2320B-2011								
Pace Analytical Services - Asheville								
Alkalinity, Bicarbonate (CaCO ₃)	62.2	mg/L	5.0	1		09/10/21 15:38		
Alkalinity, Total as CaCO ₃	62.2	mg/L	5.0	1		09/10/21 15:38		
300.0 IC Anions 28 Days								
Analytical Method: EPA 300.0 Rev 2.1 1993								
Pace Analytical Services - Asheville								
Chloride	12.7	mg/L	1.0	1		09/09/21 22:05	16887-00-6	
Fluoride	0.31	mg/L	0.10	1		09/09/21 22:05	16984-48-8	
Sulfate	16.7	mg/L	1.0	1		09/09/21 22:05	14808-79-8	

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: Plant McDonough CCR-Ash Pond
Pace Project No.: 92559814

QC Batch: 645863 Analysis Method: EPA 6010D
QC Batch Method: EPA 3010A Analysis Description: 6010D ATL
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92559814001, 92559814002, 92559814003, 92559814004

METHOD BLANK: 3387833 Matrix: Water
Associated Lab Samples: 92559814001, 92559814002, 92559814003, 92559814004

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Calcium	mg/L	ND	1.0	09/09/21 16:55	
Magnesium	mg/L	ND	0.050	09/09/21 16:55	
Potassium	mg/L	ND	0.20	09/09/21 16:55	
Sodium	mg/L	ND	1.0	09/09/21 16:55	

LABORATORY CONTROL SAMPLE: 3387834

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Calcium	mg/L	1	1.0	105	80-120	
Magnesium	mg/L	1	1.1	106	80-120	
Potassium	mg/L	1	1.1	105	80-120	
Sodium	mg/L	1	1.1	108	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3387835 3387836

Parameter	Units	MS		MSD		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		92558259003 Result	Spike Conc.	Spike Conc.	Result						
Calcium	mg/L	11.0	1	1	12.0	12.1	103	112	75-125	1	20
Magnesium	mg/L	36.1	1	1	37.0	36.6	92	43	75-125	1	20 M1
Potassium	mg/L	6.1	1	1	7.1	7.0	102	90	75-125	2	20
Sodium	mg/L	24.9	1	1	25.9	25.3	101	40	75-125	2	20 M1

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: Plant McDonough CCR-Ash Pond
Pace Project No.: 92559814

QC Batch: 645868 Analysis Method: EPA 6020B
QC Batch Method: EPA 3005A Analysis Description: 6020 MET
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92559814001, 92559814002, 92559814003, 92559814004

METHOD BLANK: 3387883 Matrix: Water
Associated Lab Samples: 92559814001, 92559814002, 92559814003, 92559814004

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Arsenic	mg/L	ND	0.0050	09/09/21 20:18	
Boron	mg/L	ND	0.040	09/09/21 20:18	
Molybdenum	mg/L	ND	0.010	09/09/21 20:18	

LABORATORY CONTROL SAMPLE: 3387884

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Arsenic	mg/L	0.1	0.096	96	80-120	
Boron	mg/L	1	0.95	95	80-120	
Molybdenum	mg/L	0.1	0.11	107	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3387885 3387886

Parameter	Units	92558259007 Result	MS		MSD		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
			Spike Conc.	MS Result	MSD Result							
Arsenic	mg/L	0.0013J	0.1	0.098	0.098	97	97	75-125	0	20		
Boron	mg/L	6.1	1	7.4	7.1	131	100	75-125	4	20	M1	
Molybdenum	mg/L	ND	0.1	0.11	0.11	110	106	75-125	4	20		

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QUALITY CONTROL DATA

Project: Plant McDonough CCR-Ash Pond

Pace Project No.: 92559814

QC Batch: 646143 Analysis Method: SM 2540C-2011
 QC Batch Method: SM 2540C-2011 Analysis Description: 2540C Total Dissolved Solids
 Laboratory: Pace Analytical Services - Peachtree Corners, GA

Associated Lab Samples: 92559814001, 92559814002, 92559814003, 92559814004

METHOD BLANK: 3389158 Matrix: Water
 Associated Lab Samples: 92559814001, 92559814002, 92559814003, 92559814004

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	ND	10.0	09/09/21 19:50	

LABORATORY CONTROL SAMPLE: 3389159

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	400	387	97	90-111	

SAMPLE DUPLICATE: 3389160

Parameter	Units	92560175001 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	106000	138000	26	10	D6

SAMPLE DUPLICATE: 3389161

Parameter	Units	92559795003 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	43.0	114	90	10	D6

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: Plant McDonough CCR-Ash Pond
Pace Project No.: 92559814

QC Batch: 646357 Analysis Method: SM 2320B-2011
QC Batch Method: SM 2320B-2011 Analysis Description: 2320B Alkalinity
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 92559814001, 92559814002, 92559814003, 92559814004

METHOD BLANK: 3390316 Matrix: Water
Associated Lab Samples: 92559814001, 92559814002, 92559814003, 92559814004

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Alkalinity, Total as CaCO3	mg/L	ND	5.0	09/10/21 13:46	
Alkalinity,Bicarbonate (CaCO3)	mg/L	ND	5.0	09/10/21 13:46	

LABORATORY CONTROL SAMPLE: 3390317

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO3	mg/L	50	52.2	104	80-120	

LABORATORY CONTROL SAMPLE: 3390318

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO3	mg/L	50	51.6	103	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3390319 3390320

Parameter	Units	92559814001		3390320		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		Result	MS Spike Conc.	MSD Spike Conc.	MS Result						
Alkalinity, Total as CaCO3	mg/L	60.1	50	50	109	111	98	101	80-120	2	25

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3390321 3390322

Parameter	Units	92559852004		3390322		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		Result	MS Spike Conc.	MSD Spike Conc.	MS Result						
Alkalinity, Total as CaCO3	mg/L	26.4	50	50	77.2	78.1	102	103	80-120	1	25

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QUALITY CONTROL DATA

Project: Plant McDonough CCR-Ash Pond
Pace Project No.: 92559814

QC Batch: 646085 Analysis Method: EPA 300.0 Rev 2.1 1993
QC Batch Method: EPA 300.0 Rev 2.1 1993 Analysis Description: 300.0 IC Anions
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 92559814001, 92559814002, 92559814003, 92559814004

METHOD BLANK: 3388761 Matrix: Water
Associated Lab Samples: 92559814001, 92559814002, 92559814003, 92559814004

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	09/09/21 17:24	
Fluoride	mg/L	ND	0.10	09/09/21 17:24	
Sulfate	mg/L	ND	1.0	09/09/21 17:24	

LABORATORY CONTROL SAMPLE: 3388762

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	50	49.8	100	90-110	
Fluoride	mg/L	2.5	2.4	96	90-110	
Sulfate	mg/L	50	50.8	102	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3388763 3388764

Parameter	Units	92559773002		MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		Result	Conc.	Conc.	Result	Result	% Rec	% Rec	Limits	RPD	RPD	Qual	
Chloride	mg/L	34.7	50	50	87.2	87.7	105	106	90-110	1	10		
Fluoride	mg/L	0.61	2.5	2.5	3.3	3.3	107	106	90-110	1	10		
Sulfate	mg/L	135	50	50	184	184	98	99	90-110	0	10		

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3388765 3388766

Parameter	Units	92559852002		MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		Result	Conc.	Conc.	Result	Result	% Rec	% Rec	Limits	RPD	RPD	Qual	
Chloride	mg/L	9.7	50	50	62.5	63.9	106	108	90-110	2	10		
Fluoride	mg/L	0.14	2.5	2.5	2.7	2.8	102	105	90-110	3	10		
Sulfate	mg/L	6.4	50	50	61.0	62.2	109	112	90-110	2	10 M1		

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REPORT OF LABORATORY ANALYSIS

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QUALIFIERS

Project: Plant McDonough CCR-Ash Pond

Pace Project No.: 92559814

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

Acid preservation may not be appropriate for 2 Chloroethylvinyl ether.

A separate vial preserved to a pH of 4-5 is recommended in SW846 Chapter 4 for the analysis of Acrolein and Acrylonitrile by EPA Method 8260.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Reported results are not rounded until the final step prior to reporting. Therefore, calculated parameters that are typically reported as "Total" may vary slightly from the sum of the reported component parameters.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

ANALYTE QUALIFIERS

D6 The precision between the sample and sample duplicate exceeded laboratory control limits.

M1 Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Plant McDonough CCR-Ash Pond
Pace Project No.: 92559814

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92559814001	UT-1_US	EPA 3010A	645863	EPA 6010D	646176
92559814002	UT02	EPA 3010A	645863	EPA 6010D	646176
92559814003	UT03	EPA 3010A	645863	EPA 6010D	646176
92559814004	UT01_DS	EPA 3010A	645863	EPA 6010D	646176
92559814001	UT-1_US	EPA 3005A	645868	EPA 6020B	646190
92559814002	UT02	EPA 3005A	645868	EPA 6020B	646190
92559814003	UT03	EPA 3005A	645868	EPA 6020B	646190
92559814004	UT01_DS	EPA 3005A	645868	EPA 6020B	646190
92559814001	UT-1_US	SM 2540C-2011	646143		
92559814002	UT02	SM 2540C-2011	646143		
92559814003	UT03	SM 2540C-2011	646143		
92559814004	UT01_DS	SM 2540C-2011	646143		
92559814001	UT-1_US	SM 2320B-2011	646357		
92559814002	UT02	SM 2320B-2011	646357		
92559814003	UT03	SM 2320B-2011	646357		
92559814004	UT01_DS	SM 2320B-2011	646357		
92559814001	UT-1_US	EPA 300.0 Rev 2.1 1993	646085		
92559814002	UT02	EPA 300.0 Rev 2.1 1993	646085		
92559814003	UT03	EPA 300.0 Rev 2.1 1993	646085		
92559814004	UT01_DS	EPA 300.0 Rev 2.1 1993	646085		

REPORT OF LABORATORY ANALYSIS

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Laboratory receiving samples:
 Asheville Eden Greenwood Huntersville Raleigh Mechanicsville Atlanta Kernersville

Sample Condition Upon Receipt

Client Name: **Arcadis**

WO#: 92559814
 PM: MP Due Date: 09/15/21
 CLIENT: GA-ArcadAtI

Courier: Fed Ex UPS USPS Client
 Commercial Pace Other: _____

Custody Seal Present? Yes No Seals Intact? Yes No

Date/Initials Person Examining Contents: **9/8/21**
COV

Packing Material: Bubble Wrap Bubble Bags None Other

Biological Tissue Frozen? Yes No

Thermometer: IR Gun ID: **214** Type of Ice: Wet Blue None

Cooler Temp: **3.8** Correction Factor: **-0.1**
 Add/Subtract (°C)

Temp should be above freezing to 6°C
 Samples out of temp criteria. Samples on ice, cooling process has begun

Cooler Temp Corrected (°C): **3.7**

USDA Regulated Soil (N/A, water sample)

Did samples originate in a quarantine zone within the United States: CA, NY, or SC (check maps)? Yes No
 Did samples originate from a foreign source (internationally, including Hawaii and Puerto Rico)? Yes No

	Comments/Discrepancy:
Chain of Custody Present?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A 1.
Samples Arrived within Hold Time?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A 2.
Short Hold Time Analysis (<72 hr.)?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A 3.
Rush Turn Around Time Requested?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A 4.
Sufficient Volume?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A 5.
Correct Containers Used?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A 6.
Pace Containers Used?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A
Containers Intact?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A 7.
Dissolved analysis: Samples Field Filtered?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A 8.
Sample Labels Match COC?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A 9.
-Includes Date/Time/ID/Analysis Matrix:	W 7.
Headspace in VOA Vials (>5-6mm)?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A 10.
Trip Blank Present?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A 11.
Trip Blank Custody Seals Present?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A

COMMENTS/SAMPLE DISCREPANCY Field Data Required? Yes No

CLIENT NOTIFICATION/RESOLUTION Lot ID of split containers:

Person contacted: _____ Date/Time: _____

Project Manager SCURF Review: _____ Date: _____

Project Manager SRF Review: _____ Date: _____



Document Name:
Sample Condition Upon Receipt (SCUR)

Document Revised: October 28, 2020
Page 2 of 2

Document No.:
F-CAR-CS-033-Rev.07

Issuing Authority:
Pace Carolinas Quality Office

*Check mark top half of box if pH and/or dechlorination is verified and within the acceptance range for preservation samples.

Proj

WO#: 92559814

Due Date: 09/15/21

PH: TP

CLIENT: GA-BroadR1

Exceptions: VOA, Coliform, TOC, OH and Grease, DRO/8015 (water) DOC, LHMg

**Bottom half of box is to list number of bottles

Item#	BP3U-125 mL Plastic Unpreserved (N/A) (Cl-)	BP2U-250 mL Plastic Unpreserved (N/A)	BP2U-500 mL Plastic Unpreserved (N/A)	BP1U-1 liter Plastic Unpreserved (N/A)	BP4S-125 mL Plastic H2SO4 (pH < 2) (Cl-)	BP3N-250 mL plastic HNO3 (pH < 2)	BP4Z-125 mL Plastic Zn Acetate & NaOH (>9)	BP4C-125 mL Plastic NaOH (pH > 12) (Cl-)	WG5U-Wide-mouthed Glass Jar Unpreserved	AG3U-1 liter Amber Unpreserved (N/A) (Cl-)	AG1H-1 liter Amber HCl (pH < 2)	AG3U-250 mL Amber Unpreserved (N/A) (Cl-)	AG1S-1 liter Amber H2SO4 (pH < 2)	AG3S-250 mL Amber H2SO4 (pH < 2)	AG3A(DG3A)-250 mL Amber NH4Cl (N/A)(Cl-)	DG9H-40 mL VOA HCl (N/A)	VG9T-40 mL VOA Na2S2O3 (N/A)	VG9U-40 mL VOA Unp (N/A)	DG9P-40 mL VOA H3PO4 (N/A)	VOAK (6 vials per kit)-5035 kit (N/A)	V/GK (3 vials per kit)-YPH/Gas kit (N/A)	SPST-125 mL Sterile Plastic (N/A - lab)	SPET-250 mL Sterile Plastic (N/A - lab)	BP3A-250 mL Plastic (NH2)ZSO4 (9:3:9:7)	AG9U-100 mL Amber Unpreserved vials (N/A)	VS9U-20 mL Scintillation vials (N/A)	DG9U-40 mL Amber Unpreserved vials (N/A)		
1		2																											
2		2																											
3		2																											
4		2																											
5																													
6																													
7																													
8																													
9																													
10																													
11																													
12																													

pH Adjustment Log for Preserved Samples

Sample ID	Type of Preservative	pH upon receipt	Date preservation adjusted	Time preservation adjusted	Amount of Preservative added	Lot #

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHMR Certification Office (i.e. Out of box, incorrect preservative, out of temp, incorrect containers).

September 17, 2021

Kelley Sharpe
ARCADIS - Atlanta
2839 Paces Ferry Rd
STE 900
Atlanta, GA 30339

RE: Project: Plant McDonough CCR-Ash Pond
Pace Project No.: 92559852

Dear Kelley Sharpe:

Enclosed are the analytical results for sample(s) received by the laboratory on September 08, 2021. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

- Pace Analytical Services - Asheville
- Pace Analytical Services - Peachtree Corners, GA

If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Maiya Parks
maiya.parks@pacelabs.com
(770)734-4200
Project Manager

Enclosures

cc: Joju Abraham, Georgia Power-CCR
Ben Hodges, Georgia Power
Warren Johnson, ARCADIS - Atlanta



REPORT OF LABORATORY ANALYSIS

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CERTIFICATIONS

Project: Plant McDonough CCR-Ash Pond

Pace Project No.: 92559852

Pace Analytical Services Asheville

2225 Riverside Drive, Asheville, NC 28804

Florida/NELAP Certification #: E87648

North Carolina Drinking Water Certification #: 37712

North Carolina Wastewater Certification #: 40

South Carolina Certification #: 99030001

Virginia/VELAP Certification #: 460222

Pace Analytical Services Peachtree Corners

110 Technology Pkwy, Peachtree Corners, GA 30092

Florida DOH Certification #: E87315

Georgia DW Inorganics Certification #: 812

North Carolina Certification #: 381

South Carolina Certification #: 98011001

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SAMPLE SUMMARY

Project: Plant McDonough CCR-Ash Pond

Pace Project No.: 92559852

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92559852001	CR+0.4	Water	09/07/21 14:56	09/08/21 12:45
92559852002	CR+0.2	Water	09/07/21 15:03	09/08/21 12:45
92559852003	CR-0.1	Water	09/07/21 15:08	09/08/21 12:45
92559852004	DW_DS	Water	09/07/21 15:10	09/08/21 12:45
92559852005	DW_US	Water	09/07/21 15:18	09/08/21 12:45
92559852006	CR-0.2	Water	09/07/21 15:23	09/08/21 12:45
92559852007	CR-0.5	Water	09/07/21 15:29	09/08/21 12:45

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SAMPLE ANALYTE COUNT

Project: Plant McDonough CCR-Ash Pond
Pace Project No.: 92559852

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
92559852001	CR+0.4	EPA 6010D	DRB	4	PASI-GA
		EPA 6020B	CW1	4	PASI-GA
		SM 2540C-2011	ALW	1	PASI-GA
		SM 2320B-2011	ECH	2	PASI-A
		EPA 300.0 Rev 2.1 1993	CDC	3	PASI-A
92559852002	CR+0.2	EPA 6010D	DRB	4	PASI-GA
		EPA 6020B	CW1	4	PASI-GA
		SM 2540C-2011	ALW	1	PASI-GA
		SM 2320B-2011	ECH	2	PASI-A
		EPA 300.0 Rev 2.1 1993	CDC	3	PASI-A
92559852003	CR-0.1	EPA 6010D	DRB	4	PASI-GA
		EPA 6020B	CW1	2	PASI-GA
		SM 2540C-2011	ALW	1	PASI-GA
		SM 2320B-2011	ECH	2	PASI-A
		EPA 300.0 Rev 2.1 1993	CDC	3	PASI-A
92559852004	DW_DS	EPA 6010D	DRB	4	PASI-GA
		EPA 6020B	CW1	2	PASI-GA
		SM 2540C-2011	ALW	1	PASI-GA
		SM 2320B-2011	ECH	2	PASI-A
		EPA 300.0 Rev 2.1 1993	CDC	3	PASI-A
92559852005	DW_US	EPA 6010D	DRB	4	PASI-GA
		EPA 6020B	CW1	2	PASI-GA
		SM 2540C-2011	ALW	1	PASI-GA
		SM 2320B-2011	ECH	2	PASI-A
		EPA 300.0 Rev 2.1 1993	CDC	3	PASI-A
92559852006	CR-0.2	EPA 6010D	DRB	4	PASI-GA
		EPA 6020B	CW1	4	PASI-GA
		SM 2540C-2011	ALW	1	PASI-GA
		SM 2320B-2011	ECH	2	PASI-A
		EPA 300.0 Rev 2.1 1993	CDC	3	PASI-A
92559852007	CR-0.5	EPA 6010D	DRB	4	PASI-GA
		EPA 6020B	CW1	4	PASI-GA
		SM 2540C-2011	ALW	1	PASI-GA
		SM 2320B-2011	ECH	2	PASI-A
		EPA 300.0 Rev 2.1 1993	CDC	3	PASI-A

PASI-A = Pace Analytical Services - Asheville

PASI-GA = Pace Analytical Services - Peachtree Corners, GA

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Plant McDonough CCR-Ash Pond

Pace Project No.: 92559852

Sample: CR+0.4	Lab ID: 92559852001	Collected: 09/07/21 14:56	Received: 09/08/21 12:45	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010D ATL ICP								
Analytical Method: EPA 6010D Preparation Method: EPA 3010A								
Pace Analytical Services - Peachtree Corners, GA								
Potassium	3.4	mg/L	0.20	1	09/09/21 11:55	09/09/21 19:05	7440-09-7	
Sodium	10.0	mg/L	1.0	1	09/09/21 11:55	09/09/21 19:05	7440-23-5	
Calcium	6.7	mg/L	1.0	1	09/09/21 11:55	09/09/21 19:05	7440-70-2	
Magnesium	2.9	mg/L	0.050	1	09/09/21 11:55	09/09/21 19:05	7439-95-4	
6020 MET ICPMS								
Analytical Method: EPA 6020B Preparation Method: EPA 3005A								
Pace Analytical Services - Peachtree Corners, GA								
Arsenic	ND	mg/L	0.0050	1	09/09/21 11:50	09/09/21 22:13	7440-38-2	
Boron	ND	mg/L	0.040	1	09/09/21 11:50	09/09/21 22:13	7440-42-8	
Cobalt	ND	mg/L	0.0050	1	09/09/21 11:50	09/09/21 22:13	7440-48-4	
Molybdenum	ND	mg/L	0.010	1	09/09/21 11:50	09/09/21 22:13	7439-98-7	
2540C Total Dissolved Solids								
Analytical Method: SM 2540C-2011								
Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	77.0	mg/L	10.0	1		09/09/21 19:53		
2320B Alkalinity								
Analytical Method: SM 2320B-2011								
Pace Analytical Services - Asheville								
Alkalinity, Bicarbonate (CaCO ₃)	26.6	mg/L	5.0	1		09/10/21 15:45		
Alkalinity, Total as CaCO ₃	26.6	mg/L	5.0	1		09/10/21 15:45		
300.0 IC Anions 28 Days								
Analytical Method: EPA 300.0 Rev 2.1 1993								
Pace Analytical Services - Asheville								
Chloride	9.9	mg/L	1.0	1		09/09/21 22:25	16887-00-6	
Fluoride	0.14	mg/L	0.10	1		09/09/21 22:25	16984-48-8	
Sulfate	7.0	mg/L	1.0	1		09/09/21 22:25	14808-79-8	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Plant McDonough CCR-Ash Pond

Pace Project No.: 92559852

Sample: CR+0.2	Lab ID: 92559852002	Collected: 09/07/21 15:03	Received: 09/08/21 12:45	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010D ATL ICP								
Analytical Method: EPA 6010D Preparation Method: EPA 3010A								
Pace Analytical Services - Peachtree Corners, GA								
Potassium	3.3	mg/L	0.20	1	09/09/21 11:55	09/09/21 19:09	7440-09-7	
Sodium	9.9	mg/L	1.0	1	09/09/21 11:55	09/09/21 19:09	7440-23-5	
Calcium	6.6	mg/L	1.0	1	09/09/21 11:55	09/09/21 19:09	7440-70-2	
Magnesium	2.7	mg/L	0.050	1	09/09/21 11:55	09/09/21 19:09	7439-95-4	
6020 MET ICPMS								
Analytical Method: EPA 6020B Preparation Method: EPA 3005A								
Pace Analytical Services - Peachtree Corners, GA								
Arsenic	ND	mg/L	0.0050	1	09/09/21 11:50	09/09/21 22:19	7440-38-2	
Boron	ND	mg/L	0.040	1	09/09/21 11:50	09/09/21 22:19	7440-42-8	
Cobalt	ND	mg/L	0.0050	1	09/09/21 11:50	09/09/21 22:19	7440-48-4	
Molybdenum	ND	mg/L	0.010	1	09/09/21 11:50	09/09/21 22:19	7439-98-7	
2540C Total Dissolved Solids								
Analytical Method: SM 2540C-2011								
Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	73.0	mg/L	10.0	1		09/09/21 19:53		
2320B Alkalinity								
Analytical Method: SM 2320B-2011								
Pace Analytical Services - Asheville								
Alkalinity, Bicarbonate (CaCO ₃)	26.9	mg/L	5.0	1		09/10/21 15:50		
Alkalinity, Total as CaCO ₃	26.9	mg/L	5.0	1		09/10/21 15:50		
300.0 IC Anions 28 Days								
Analytical Method: EPA 300.0 Rev 2.1 1993								
Pace Analytical Services - Asheville								
Chloride	9.7	mg/L	1.0	1		09/09/21 22:45	16887-00-6	
Fluoride	0.14	mg/L	0.10	1		09/09/21 22:45	16984-48-8	
Sulfate	6.4	mg/L	1.0	1		09/09/21 22:45	14808-79-8	M1

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Plant McDonough CCR-Ash Pond
Pace Project No.: 92559852

Sample: CR-0.1	Lab ID: 92559852003	Collected: 09/07/21 15:08	Received: 09/08/21 12:45	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010D ATL ICP								
Analytical Method: EPA 6010D Preparation Method: EPA 3010A								
Pace Analytical Services - Peachtree Corners, GA								
Potassium	3.2	mg/L	0.20	1	09/09/21 11:55	09/09/21 19:14	7440-09-7	
Sodium	9.4	mg/L	1.0	1	09/09/21 11:55	09/09/21 19:14	7440-23-5	
Calcium	6.6	mg/L	1.0	1	09/09/21 11:55	09/09/21 19:14	7440-70-2	
Magnesium	2.7	mg/L	0.050	1	09/09/21 11:55	09/09/21 19:14	7439-95-4	
6020 MET ICPMS								
Analytical Method: EPA 6020B Preparation Method: EPA 3005A								
Pace Analytical Services - Peachtree Corners, GA								
Boron	ND	mg/L	0.040	1	09/09/21 11:50	09/09/21 22:36	7440-42-8	
Cobalt	ND	mg/L	0.0050	1	09/09/21 11:50	09/09/21 22:36	7440-48-4	
2540C Total Dissolved Solids								
Analytical Method: SM 2540C-2011								
Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	78.0	mg/L	10.0	1		09/09/21 19:54		
2320B Alkalinity								
Analytical Method: SM 2320B-2011								
Pace Analytical Services - Asheville								
Alkalinity, Bicarbonate (CaCO ₃)	26.8	mg/L	5.0	1		09/10/21 15:56		
Alkalinity, Total as CaCO ₃	26.8	mg/L	5.0	1		09/10/21 15:56		
300.0 IC Anions 28 Days								
Analytical Method: EPA 300.0 Rev 2.1 1993								
Pace Analytical Services - Asheville								
Chloride	9.8	mg/L	1.0	1		09/09/21 23:51	16887-00-6	
Fluoride	0.14	mg/L	0.10	1		09/09/21 23:51	16984-48-8	
Sulfate	8.0	mg/L	1.0	1		09/09/21 23:51	14808-79-8	

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ANALYTICAL RESULTS

Project: Plant McDonough CCR-Ash Pond
Pace Project No.: 92559852

Sample: DW_DS		Lab ID: 92559852004	Collected: 09/07/21 15:10	Received: 09/08/21 12:45	Matrix: Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010D ATL ICP		Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA						
Potassium	3.2	mg/L	0.20	1	09/09/21 11:55	09/09/21 19:19	7440-09-7	
Sodium	9.6	mg/L	1.0	1	09/09/21 11:55	09/09/21 19:19	7440-23-5	
Calcium	7.3	mg/L	1.0	1	09/09/21 11:55	09/09/21 19:19	7440-70-2	
Magnesium	2.9	mg/L	0.050	1	09/09/21 11:55	09/09/21 19:19	7439-95-4	
6020 MET ICPMS		Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA						
Boron	ND	mg/L	0.040	1	09/09/21 11:50	09/09/21 22:41	7440-42-8	
Cobalt	ND	mg/L	0.0050	1	09/09/21 11:50	09/09/21 22:41	7440-48-4	
2540C Total Dissolved Solids		Analytical Method: SM 2540C-2011 Pace Analytical Services - Peachtree Corners, GA						
Total Dissolved Solids	83.0	mg/L	10.0	1		09/09/21 19:54		
2320B Alkalinity		Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville						
Alkalinity, Bicarbonate (CaCO ₃)	26.4	mg/L	5.0	1		09/10/21 16:02		
Alkalinity, Total as CaCO ₃	26.4	mg/L	5.0	1		09/10/21 16:02		
300.0 IC Anions 28 Days		Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville						
Chloride	9.8	mg/L	1.0	1		09/10/21 00:16	16887-00-6	
Fluoride	0.14	mg/L	0.10	1		09/10/21 00:16	16984-48-8	
Sulfate	10.4	mg/L	1.0	1		09/10/21 00:16	14808-79-8	

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ANALYTICAL RESULTS

Project: Plant McDonough CCR-Ash Pond
 Pace Project No.: 92559852

Sample: DW_US	Lab ID: 92559852005	Collected: 09/07/21 15:18	Received: 09/08/21 12:45	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010D ATL ICP								
Analytical Method: EPA 6010D Preparation Method: EPA 3010A								
Pace Analytical Services - Peachtree Corners, GA								
Potassium	3.4	mg/L	0.20	1	09/09/21 11:55	09/09/21 19:24	7440-09-7	
Sodium	10.1	mg/L	1.0	1	09/09/21 11:55	09/09/21 19:24	7440-23-5	
Calcium	6.7	mg/L	1.0	1	09/09/21 11:55	09/09/21 19:24	7440-70-2	
Magnesium	2.8	mg/L	0.050	1	09/09/21 11:55	09/09/21 19:24	7439-95-4	
6020 MET ICPMS								
Analytical Method: EPA 6020B Preparation Method: EPA 3005A								
Pace Analytical Services - Peachtree Corners, GA								
Boron	0.073	mg/L	0.040	1	09/09/21 11:50	09/09/21 22:47	7440-42-8	
Cobalt	ND	mg/L	0.0050	1	09/09/21 11:50	09/09/21 22:47	7440-48-4	
2540C Total Dissolved Solids								
Analytical Method: SM 2540C-2011								
Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	82.0	mg/L	10.0	1		09/09/21 19:54		
2320B Alkalinity								
Analytical Method: SM 2320B-2011								
Pace Analytical Services - Asheville								
Alkalinity, Bicarbonate (CaCO3)	28.0	mg/L	5.0	1		09/10/21 16:27		
Alkalinity, Total as CaCO3	28.0	mg/L	5.0	1		09/10/21 16:27		
300.0 IC Anions 28 Days								
Analytical Method: EPA 300.0 Rev 2.1 1993								
Pace Analytical Services - Asheville								
Chloride	9.9	mg/L	1.0	1		09/10/21 01:37	16887-00-6	
Fluoride	0.14	mg/L	0.10	1		09/10/21 01:37	16984-48-8	
Sulfate	6.5	mg/L	1.0	1		09/10/21 01:37	14808-79-8	

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ANALYTICAL RESULTS

Project: Plant McDonough CCR-Ash Pond
Pace Project No.: 92559852

Sample: CR-0.2		Lab ID: 92559852006		Collected: 09/07/21 15:23	Received: 09/08/21 12:45	Matrix: Water		
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010D ATL ICP		Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA						
Potassium	3.3	mg/L	0.20	1	09/09/21 11:55	09/09/21 19:28	7440-09-7	
Sodium	9.7	mg/L	1.0	1	09/09/21 11:55	09/09/21 19:28	7440-23-5	
Calcium	6.6	mg/L	1.0	1	09/09/21 11:55	09/09/21 19:28	7440-70-2	
Magnesium	2.8	mg/L	0.050	1	09/09/21 11:55	09/09/21 19:28	7439-95-4	
6020 MET ICPMS		Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA						
Arsenic	ND	mg/L	0.0050	1	09/09/21 11:50	09/09/21 22:53	7440-38-2	
Boron	0.046	mg/L	0.040	1	09/09/21 11:50	09/09/21 22:53	7440-42-8	
Cobalt	ND	mg/L	0.0050	1	09/09/21 11:50	09/09/21 22:53	7440-48-4	
Selenium	ND	mg/L	0.0050	1	09/09/21 11:50	09/09/21 22:53	7782-49-2	
2540C Total Dissolved Solids		Analytical Method: SM 2540C-2011 Pace Analytical Services - Peachtree Corners, GA						
Total Dissolved Solids	77.0	mg/L	10.0	1		09/13/21 17:34		
2320B Alkalinity		Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville						
Alkalinity, Bicarbonate (CaCO ₃)	27.5	mg/L	5.0	1		09/10/21 16:33		
Alkalinity, Total as CaCO ₃	27.5	mg/L	5.0	1		09/10/21 16:33		
300.0 IC Anions 28 Days		Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville						
Chloride	9.8	mg/L	1.0	1		09/10/21 01:53	16887-00-6	
Fluoride	0.13	mg/L	0.10	1		09/10/21 01:53	16984-48-8	
Sulfate	7.3	mg/L	1.0	1		09/10/21 01:53	14808-79-8	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Plant McDonough CCR-Ash Pond
Pace Project No.: 92559852

Sample: CR-0.5	Lab ID: 92559852007	Collected: 09/07/21 15:29	Received: 09/08/21 12:45	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010D ATL ICP								
Analytical Method: EPA 6010D Preparation Method: EPA 3010A								
Pace Analytical Services - Peachtree Corners, GA								
Potassium	3.1	mg/L	0.20	1	09/09/21 11:55	09/09/21 19:33	7440-09-7	
Sodium	9.2	mg/L	1.0	1	09/09/21 11:55	09/09/21 19:33	7440-23-5	
Calcium	6.5	mg/L	1.0	1	09/09/21 11:55	09/09/21 19:33	7440-70-2	
Magnesium	2.6	mg/L	0.050	1	09/09/21 11:55	09/09/21 19:33	7439-95-4	
6020 MET ICPMS								
Analytical Method: EPA 6020B Preparation Method: EPA 3005A								
Pace Analytical Services - Peachtree Corners, GA								
Arsenic	ND	mg/L	0.0050	1	09/09/21 11:50	09/09/21 22:59	7440-38-2	
Boron	ND	mg/L	0.040	1	09/09/21 11:50	09/09/21 22:59	7440-42-8	
Cobalt	ND	mg/L	0.0050	1	09/09/21 11:50	09/09/21 22:59	7440-48-4	
Selenium	ND	mg/L	0.0050	1	09/09/21 11:50	09/09/21 22:59	7782-49-2	
2540C Total Dissolved Solids								
Analytical Method: SM 2540C-2011								
Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	75.0	mg/L	10.0	1		09/13/21 17:34		
2320B Alkalinity								
Analytical Method: SM 2320B-2011								
Pace Analytical Services - Asheville								
Alkalinity, Bicarbonate (CaCO ₃)	27.1	mg/L	5.0	1		09/10/21 16:48		
Alkalinity, Total as CaCO ₃	27.1	mg/L	5.0	1		09/10/21 16:48		
300.0 IC Anions 28 Days								
Analytical Method: EPA 300.0 Rev 2.1 1993								
Pace Analytical Services - Asheville								
Chloride	9.6	mg/L	1.0	1		09/10/21 02:09	16887-00-6	
Fluoride	0.14	mg/L	0.10	1		09/10/21 02:09	16984-48-8	
Sulfate	6.3	mg/L	1.0	1		09/10/21 02:09	14808-79-8	

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: Plant McDonough CCR-Ash Pond
Pace Project No.: 92559852

QC Batch: 645863 Analysis Method: EPA 6010D
QC Batch Method: EPA 3010A Analysis Description: 6010D ATL
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92559852001, 92559852002, 92559852003, 92559852004, 92559852005, 92559852006, 92559852007

METHOD BLANK: 3387833 Matrix: Water
Associated Lab Samples: 92559852001, 92559852002, 92559852003, 92559852004, 92559852005, 92559852006, 92559852007

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Calcium	mg/L	ND	1.0	09/09/21 16:55	
Magnesium	mg/L	ND	0.050	09/09/21 16:55	
Potassium	mg/L	ND	0.20	09/09/21 16:55	
Sodium	mg/L	ND	1.0	09/09/21 16:55	

LABORATORY CONTROL SAMPLE: 3387834

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Calcium	mg/L	1	1.0	105	80-120	
Magnesium	mg/L	1	1.1	106	80-120	
Potassium	mg/L	1	1.1	105	80-120	
Sodium	mg/L	1	1.1	108	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3387835 3387836

Parameter	Units	MS		MSD		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		92558259003 Result	Spike Conc.	Spike Conc.	Result						
Calcium	mg/L	11.0	1	1	12.0	12.1	103	112	75-125	1	20
Magnesium	mg/L	36.1	1	1	37.0	36.6	92	43	75-125	1	20 M1
Potassium	mg/L	6.1	1	1	7.1	7.0	102	90	75-125	2	20
Sodium	mg/L	24.9	1	1	25.9	25.3	101	40	75-125	2	20 M1

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: Plant McDonough CCR-Ash Pond

Pace Project No.: 92559852

QC Batch: 645868 Analysis Method: EPA 6020B
QC Batch Method: EPA 3005A Analysis Description: 6020 MET
Laboratory: Pace Analytical Services - Peachtree Corners, GA

Associated Lab Samples: 92559852001, 92559852002, 92559852003, 92559852004, 92559852005, 92559852006, 92559852007

METHOD BLANK: 3387883

Matrix: Water

Associated Lab Samples: 92559852001, 92559852002, 92559852003, 92559852004, 92559852005, 92559852006, 92559852007

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Arsenic	mg/L	ND	0.0050	09/09/21 20:18	
Boron	mg/L	ND	0.040	09/09/21 20:18	
Cobalt	mg/L	ND	0.0050	09/09/21 20:18	
Molybdenum	mg/L	ND	0.010	09/09/21 20:18	
Selenium	mg/L	ND	0.0050	09/09/21 20:18	

LABORATORY CONTROL SAMPLE: 3387884

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Arsenic	mg/L	0.1	0.096	96	80-120	
Boron	mg/L	1	0.95	95	80-120	
Cobalt	mg/L	0.1	0.10	100	80-120	
Molybdenum	mg/L	0.1	0.11	107	80-120	
Selenium	mg/L	0.1	0.096	96	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3387885 3387886

Parameter	Units	MS		MSD		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		92558259007 Result	Spike Conc.	Spike Conc.	Result						
Arsenic	mg/L	0.0013J	0.1	0.1	0.098	0.098	97	97	75-125	0	20
Boron	mg/L	6.1	1	1	7.4	7.1	131	100	75-125	4	20 M1
Cobalt	mg/L	ND	0.1	0.1	0.096	0.096	96	96	75-125	0	20
Molybdenum	mg/L	ND	0.1	0.1	0.11	0.11	110	106	75-125	4	20
Selenium	mg/L	0.060	0.1	0.1	0.15	0.16	92	95	75-125	2	20

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: Plant McDonough CCR-Ash Pond
Pace Project No.: 92559852

QC Batch: 646143 Analysis Method: SM 2540C-2011
QC Batch Method: SM 2540C-2011 Analysis Description: 2540C Total Dissolved Solids
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92559852001, 92559852002, 92559852003, 92559852004, 92559852005

METHOD BLANK: 3389158 Matrix: Water
Associated Lab Samples: 92559852001, 92559852002, 92559852003, 92559852004, 92559852005

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	ND	10.0	09/09/21 19:50	

LABORATORY CONTROL SAMPLE: 3389159

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	400	387	97	90-111	

SAMPLE DUPLICATE: 3389160

Parameter	Units	92560175001 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	106000	138000	26	10	D6

SAMPLE DUPLICATE: 3389161

Parameter	Units	92559795003 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	43.0	114	90	10	D6

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: Plant McDonough CCR-Ash Pond
Pace Project No.: 92559852

QC Batch: 646764 Analysis Method: SM 2540C-2011
QC Batch Method: SM 2540C-2011 Analysis Description: 2540C Total Dissolved Solids
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92559852006, 92559852007

METHOD BLANK: 3392639 Matrix: Water
Associated Lab Samples: 92559852006, 92559852007

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	ND	10.0	09/13/21 17:34	

LABORATORY CONTROL SAMPLE: 3392640

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	400	410	102	90-111	

SAMPLE DUPLICATE: 3392641

Parameter	Units	92560619001 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	506	546	8	10	

SAMPLE DUPLICATE: 3392642

Parameter	Units	92560079008 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	70.0	91.0	26	10	D6

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: Plant McDonough CCR-Ash Pond

Pace Project No.: 92559852

QC Batch: 646357 Analysis Method: SM 2320B-2011
 QC Batch Method: SM 2320B-2011 Analysis Description: 2320B Alkalinity
 Laboratory: Pace Analytical Services - Asheville

Associated Lab Samples: 92559852001, 92559852002, 92559852003, 92559852004, 92559852005, 92559852006, 92559852007

METHOD BLANK: 3390316 Matrix: Water
 Associated Lab Samples: 92559852001, 92559852002, 92559852003, 92559852004, 92559852005, 92559852006, 92559852007

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Alkalinity, Total as CaCO3	mg/L	ND	5.0	09/10/21 13:46	
Alkalinity, Bicarbonate (CaCO3)	mg/L	ND	5.0	09/10/21 13:46	

LABORATORY CONTROL SAMPLE: 3390317

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO3	mg/L	50	52.2	104	80-120	

LABORATORY CONTROL SAMPLE: 3390318

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO3	mg/L	50	51.6	103	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3390319 3390320

Parameter	Units	92559814001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Alkalinity, Total as CaCO3	mg/L	60.1	50	50	109	111	98	101	80-120	2	25	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3390321 3390322

Parameter	Units	92559852004 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Alkalinity, Total as CaCO3	mg/L	26.4	50	50	77.2	78.1	102	103	80-120	1	25	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: Plant McDonough CCR-Ash Pond
Pace Project No.: 92559852

QC Batch: 646085 Analysis Method: EPA 300.0 Rev 2.1 1993
QC Batch Method: EPA 300.0 Rev 2.1 1993 Analysis Description: 300.0 IC Anions
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 92559852001, 92559852002, 92559852003, 92559852004, 92559852005, 92559852006, 92559852007

METHOD BLANK: 3388761 Matrix: Water
Associated Lab Samples: 92559852001, 92559852002, 92559852003, 92559852004, 92559852005, 92559852006, 92559852007

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	09/09/21 17:24	
Fluoride	mg/L	ND	0.10	09/09/21 17:24	
Sulfate	mg/L	ND	1.0	09/09/21 17:24	

LABORATORY CONTROL SAMPLE: 3388762

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	50	49.8	100	90-110	
Fluoride	mg/L	2.5	2.4	96	90-110	
Sulfate	mg/L	50	50.8	102	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3388763 3388764

Parameter	Units	MS		MSD		MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		92559773002 Result	Spike Conc.	Spike Conc.	Conc.								
Chloride	mg/L	34.7	50	50	50	87.2	87.7	105	106	90-110	1	10	
Fluoride	mg/L	0.61	2.5	2.5	2.5	3.3	3.3	107	106	90-110	1	10	
Sulfate	mg/L	135	50	50	50	184	184	98	99	90-110	0	10	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3388765 3388766

Parameter	Units	MS		MSD		MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		92559852002 Result	Spike Conc.	Spike Conc.	Conc.								
Chloride	mg/L	9.7	50	50	50	62.5	63.9	106	108	90-110	2	10	
Fluoride	mg/L	0.14	2.5	2.5	2.5	2.7	2.8	102	105	90-110	3	10	
Sulfate	mg/L	6.4	50	50	50	61.0	62.2	109	112	90-110	2	10 M1	

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REPORT OF LABORATORY ANALYSIS

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QUALIFIERS

Project: Plant McDonough CCR-Ash Pond

Pace Project No.: 92559852

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

Acid preservation may not be appropriate for 2 Chloroethylvinyl ether.

A separate vial preserved to a pH of 4-5 is recommended in SW846 Chapter 4 for the analysis of Acrolein and Acrylonitrile by EPA Method 8260.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Reported results are not rounded until the final step prior to reporting. Therefore, calculated parameters that are typically reported as "Total" may vary slightly from the sum of the reported component parameters.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

ANALYTE QUALIFIERS

D6 The precision between the sample and sample duplicate exceeded laboratory control limits.

M1 Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Plant McDonough CCR-Ash Pond
Pace Project No.: 92559852

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92559852001	CR+0.4	EPA 3010A	645863	EPA 6010D	646176
92559852002	CR+0.2	EPA 3010A	645863	EPA 6010D	646176
92559852003	CR-0.1	EPA 3010A	645863	EPA 6010D	646176
92559852004	DW_DS	EPA 3010A	645863	EPA 6010D	646176
92559852005	DW_US	EPA 3010A	645863	EPA 6010D	646176
92559852006	CR-0.2	EPA 3010A	645863	EPA 6010D	646176
92559852007	CR-0.5	EPA 3010A	645863	EPA 6010D	646176
92559852001	CR+0.4	EPA 3005A	645868	EPA 6020B	646190
92559852002	CR+0.2	EPA 3005A	645868	EPA 6020B	646190
92559852003	CR-0.1	EPA 3005A	645868	EPA 6020B	646190
92559852004	DW_DS	EPA 3005A	645868	EPA 6020B	646190
92559852005	DW_US	EPA 3005A	645868	EPA 6020B	646190
92559852006	CR-0.2	EPA 3005A	645868	EPA 6020B	646190
92559852007	CR-0.5	EPA 3005A	645868	EPA 6020B	646190
92559852001	CR+0.4	SM 2540C-2011	646143		
92559852002	CR+0.2	SM 2540C-2011	646143		
92559852003	CR-0.1	SM 2540C-2011	646143		
92559852004	DW_DS	SM 2540C-2011	646143		
92559852005	DW_US	SM 2540C-2011	646143		
92559852006	CR-0.2	SM 2540C-2011	646764		
92559852007	CR-0.5	SM 2540C-2011	646764		
92559852001	CR+0.4	SM 2320B-2011	646357		
92559852002	CR+0.2	SM 2320B-2011	646357		
92559852003	CR-0.1	SM 2320B-2011	646357		
92559852004	DW_DS	SM 2320B-2011	646357		
92559852005	DW_US	SM 2320B-2011	646357		
92559852006	CR-0.2	SM 2320B-2011	646357		
92559852007	CR-0.5	SM 2320B-2011	646357		
92559852001	CR+0.4	EPA 300.0 Rev 2.1 1993	646085		
92559852002	CR+0.2	EPA 300.0 Rev 2.1 1993	646085		
92559852003	CR-0.1	EPA 300.0 Rev 2.1 1993	646085		
92559852004	DW_DS	EPA 300.0 Rev 2.1 1993	646085		
92559852005	DW_US	EPA 300.0 Rev 2.1 1993	646085		
92559852006	CR-0.2	EPA 300.0 Rev 2.1 1993	646085		
92559852007	CR-0.5	EPA 300.0 Rev 2.1 1993	646085		

REPORT OF LABORATORY ANALYSIS

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Document Name:
Sample Condition Upon Receipt(SCUR)

Document Revised: October 28, 2020
Page 1 of 2

Document No.:
F-CAR-CS-033-Rev.07

Issuing Authority:
Pace Carolinas Quality Office

Laboratory receiving samples:

Asheville Eden Greenwood Huntersville Raleigh Mechanicsville Atlanta Kernersville

Sample Condition
Upon Receipt

Client Name:

Project #:

WO# : 92559852

PH: MP

Due Date: 09/15/21

CLIENT: GA-Arcadatl

Courier: Fed Ex UPS USPS Client
 Commercial Pace Other: _____

Custody Seal Present? Yes No Seals Intact? Yes No

Date/Initials Person Examining Contents: 9/13/21 *CSV*

Packing Material: Bubble Wrap Bubble Bags None Other

Biological Tissue Frozen? Yes No N/A

Thermometer: IR Gun ID: 214 Type of Ice: Wet Blue None

Cooler Temp: 1.6 Correction Factor: Add/Subtract (°C) -0.1

Temp should be above freezing to 6°C

Samples out of temp criteria. Samples on ice, cooling process has begun

Cooler Temp Corrected (°C): 1.5

USDA Registered Soil (N/A, water sample)

Did samples originate in a quarantine zone within the United States: CA, NY, or SC (check maps)?

Did samples originate from a foreign source (internationally, including Hawaii and Puerto Rico)? Yes No

Comments/Discrepancy:

Chain of Custody Present?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	1.
Samples Arrived within Hold Time?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	2.
Short Hold Time Analysis (<72 hr.)?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	3.
Rush Turn Around Time Requested?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	4.
Sufficient Volume?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	5.
Correct Containers Used?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	6.
Pace Containers Used?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Containers Intact?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	7.
Dissolved analysis: Samples Field Filtered?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	8.
Sample Labels Match COC?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	9.
-Includes Date/Time/ID/Analysis Matrix:	<i>W</i>	10.
Headspace in VOA Vials (>5-6mm)?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	10.
Trip Blank Present?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	11.
Trip Blank Custody Seals Present?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	

COMMENTS/SAMPLE DISCREPANCY

Field Data Required? Yes No

Lot ID of split containers:

CLIENT NOTIFICATION/RESOLUTION

Person contacted: _____ Date/Time: _____

Project Manager SCURF Review: _____ Date: _____

Project Manager SRF Review: _____ Date: _____



Document Name:
Sample Condition Upon Receipt(SCUR)

Document Revised: October 28, 2020
Page 2 of 2

Document No.:
F-CAR-CS-033-Rev.07

Issuing Authority:
Pace Carolinas Quality Office

*Check mark top half of box if pH and/or dechlorination is verified and within the acceptance range for preservation samples.

Project #

WO#: 92559852

PH: MP

Due Date: 09/15/21

CLIENT: GA-ArcadRI

Exceptions: VOA, Coliform, TOC, Oil and Grease, DRO/8015 (water) DOC, LLHg

**Bottom half of box is to list number of bottles

Item#	BP4U-125 mL Plastic Unpreserved (N/A) (Cl-)	BP3U-250 mL Plastic Unpreserved (N/A)	BP2U-500 mL Plastic Unpreserved (N/A)	BP1U-1 liter Plastic Unpreserved (N/A)	BP4S-125 mL Plastic H2SO4 (pH < 2) (Cl-)	BP3M-250 mL plastic HNO3 (pH < 2)	BP4Z-125 mL Plastic Zn Acetate & NaOH (>9)	BP4C-125 mL Plastic NaOH (pH > 12) (Cl-)	WGFU-Wide-mouthed Glass Jar Unpreserved	AG2U-1 liter Amber Unpreserved (N/A) (Cl-)	AG1M-1 liter Amber HCl (pH < 2)	AG3U-250 mL Amber Unpreserved (N/A) (Cl-)	AG1S-1 liter Amber H2SO4 (pH < 2)	AG3S-250 mL Amber H2SO4 (pH < 2)	AG3A(DG3A)-250 mL Amber NH4Cl (N/A)(Cl-)	DG9H-40 mL VOA HCl (N/A)	VG9T-40 mL VOA Na2S2O3 (N/A)	VG9U-40 mL VOA Urp (N/A)	DG9P-40 mL VOA H3PO4 (N/A)	VOAK (6 vials per kit)-5035 kit (N/A)	V/GK (3 vials per kit)-VPH/Gas kit (N/A)	SP5T-125 mL Sterile Plastic (N/A - lab)	SP2T-250 mL Sterile Plastic (N/A - lab)	BP3A-250 mL Plastic (NH2)2SO4 (9.3-9.7)	AG0U-100 mL Amber Unpreserved vials (N/A)	VSGU-20 mL Scintillation vials (N/A)	DG9U-40 mL Amber Unpreserved vials (N/A)		
1	2																												
2	2																												
3	2																												
4	2																												
5	2																												
6	2																												
7																													
8																													
9																													
10																													
11																													
12																													

pH Adjustment Log for Preserved Samples

Sample ID	Type of Preservative	pH upon receipt	Date preservation adjusted	Time preservation adjusted	Amount of Preservative added	Lot #

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DENR Certification Office (i.e. Out of box, incorrect preservative, out of temp, incorrect containers)

APPENDIX B

Data Validation Summaries

Quality Control Review of Analytical Data- Ash Pond AP-1 Submitted by Pace Analytical Services, LLC September & October 2021

This narrative presents results of the quality control (QC) data review performed on analytical data submitted by Pace Analytical Services, LLC. for groundwater samples collected at Plant McDonough CCR Ash Pond AP-1 between September 8, 2021 and October 27, 2021. The chemical data were reviewed to identify quality issues which could affect the use of the data for decision making purposes.

Information regarding the primary sample locations, analytical parameters, QC samples, sampling dates, and laboratory sample delivery group (SDG) designations is summarized in Table 1. In accordance with groundwater monitoring and corrective action procedures discussed in Title 40 CFR, Subpart D - Standards for the Disposal of Coal Combustion Residuals in Landfills and Surface Impoundments, the samples were analyzed for detection monitoring constituents listed in 40 CFR, Part 257, Appendix III and assessment monitoring constituents listed in 40 CFR, Part 257, Appendix IV. Test methods included Inductively Coupled Plasma- Mass Spectrometry (ICP-MS) (USEPA Method 6020B), Mercury in Liquid Wastes (USEPA Method 7470A), Inductively Coupled Plasma (ICP) (6010D), Determination of Inorganic Anions By Ion Chromatography (USEPA Method 300.0), Total Dissolved Solids (TDS) (Standard Methods 2540C), Radium-226 (USEPA Method 9315) and Radium-228 (USEPA Method 9320).

Data were reviewed in accordance with the US EPA Region IV Data Validation Standard Operating Procedures for Contract Laboratory Program (CLP) Inorganic Data by Inductively Coupled Plasma – Atomic Emission Spectroscopy and Inductively Coupled Plasma – Mass Spectroscopy (September 2011, Rev. 2.0), US EPA Region IV Data Validation Standard Operating Procedures for CLP Mercury Data by Cold Vapor Atomic Absorption (September 2011, Rev. 2.0), the National Functional Guidelines for Inorganic Superfund Methods Data Review (November 2020), and US Department of Energy, Evaluation of Radiochemical Data Usability (April 1997). The review included an assessment of the results for completeness, precision (laboratory duplicates, matrix spike/matrix spike duplicates), accuracy (laboratory control samples and matrix spike samples), and blank contamination (including field, equipment and laboratory blanks). Additionally, sample procedures, holding times and chains-of-custody were reviewed. Where there was a discrepancy between the QC criteria in the guidelines and the QC criterion established in the analytic methodology, method-specific criteria or professional judgment was used.

DATA QUALITY OBJECTIVES

- Laboratory Precision:** Laboratory goals for precision were met, with the exception of TDS, as described in the qualification section below.
- Field Precision:** Field goals for precision were met.
- Accuracy:** Laboratory goals for accuracy were met, with the exception of fluoride and sulfate.
- Detection Limits and Blanks:** Project goals for detection limits were met. Certain samples were diluted due to elevated concentrations of target analytes. Dilutions do not require qualifications based on USEPA guidelines. Detection and reporting limits of non-detect compounds are elevated proportional to the dilution when undiluted sample results are not provided by the laboratory. The data usability of diluted results was evaluated by the data user in the context of site-wide characterization. Detections were found in certain blank results, as described in the qualification sections below.
- Completeness:** There were no rejected analytical results for this event, resulting in a completion of 100%.

Holding Times: All holding time requirements were met in accordance with specific analytical methods.

QUALIFICATIONS

In general, chemical results for the samples collected at the Site were qualified on the basis of precision or accuracy, or on the basis of professional judgment. The following definitions provide brief explanations of the qualifiers which may have been assigned to data by the laboratory during the data validation process.

- U** The analyte was not detected above the method detection limit.
- J** The analyte was reported above the method detection limit and below the reporting limit. The concentration reported is an estimated value.

The data generated as part of this sampling event met the QC criteria established in the respective analytical methods and data validation guidelines except as specified below. Although these qualifications were applied to some data from samples collected at the site and reported in sample delivery groups (SDGs) 92560136, 92560137, 92560138, 92561607, 92561303, 92569178, 92560139, 92561190, 92561195, 92561303, 92561311, 92561607, 92561637, and 92569178, qualifications may not have been required or applied to all samples collected. A summary of sample qualifications can be found in Table 2.

- The TDS result in sample DGWC-69 from SDG 92561303 was qualified as estimated when the associated lab duplicate exceeded the relative percent difference criteria.
- The fluoride result in sample DGWC-37 from SDG 92561303 was qualified as estimated bias high (J+) when the associated MS/MSD recovery exceeded laboratory criteria.
- The sulfate result in sample DGWC-37 from SDG 92561303 was qualified as estimated bias low (J-) when the associated MS/MSD recovered below laboratory criteria.
- The arsenic result in sample DGWC-68A from SDG 92569178 was qualified as non-detect (U) when the analyte was detected at a similar level in an associated blank sample. As shown in Table 2, if the original sample results were below the reporting limit (RL), the results were qualified as non-detect (U) and the results were raised to the RL. If results were above the RL, the results were qualified U.
- Certain radium-228, and total radium results in SDGs 92561607 and 92561311 were qualified as non-detect (U) when radium-228 was detected at a similar concentration in an associated blank sample. As shown in Table 2, the minimum detectable concentration (MDC) was raised to the sample result as part of the (U) qualification process.
- Certain total radium results in SDGs 92561608 and 92561311 were qualified as estimated biased high (J+) for associated blank contaminations.

Golder reviewed the data from samples collected at Plant McDonough CCR Ash Pond AP-1 from September 8, 2021 and October 27, 2021 in accordance with the analytical methods, the laboratory specific QC criteria, and the guidelines. As described above, 100% of the results were acceptable for project use.

REFERENCE

Paar, J.G. & Porterfield, D.R. *Evaluation of Radiochemical Data Usability*. United States Department of Energy, Office of Environmental Restoration and Waste Management, Oak Ridge National Laboratory, April 1997.

USEPA, November 2020, National, Office of Superfund Remediation and Technology Innovation, *National Functional Guidelines for Inorganic Superfund Methods Data Review*, Revision 0.0.

USEPA, September 2011, Region 4, Science and Ecosystem Support Division, Quality Assurance Section, MTSB, *Data Validation Standard Operating Procedures for Contract Laboratory Program Inorganic Data By Inductively Coupled Plasma – Atomic Emission Spectroscopy and Inductively Coupled Plasma – Mass Spectroscopy*, Revision 2.0.

USEPA, September 2011, Region 4, Science and Ecosystem Support Division, Quality Assurance Section, MTSB, *Data Validation Standard Operating Procedures for Contract Laboratory Program Mercury Data By Cold Vapor Atomic Absorption*, Revision 2.0.

TABLE 1
Sample Summary Table
SCS Plant McDonough

SDGs	Field Identification	Collection Date	Lab Identification	Matrix	QC Samples	Analyses							
						Field pH	Total Metals (SW 6020B)	Calcium (SW 6010D)	Anions (EPA 300.0)	Total Mercury (SW 7470A)	TDS (SM 2540C-2011)	Radium-226 (EPA 9315)	Radium-226 (EPA 9320)
92561637	B-105D	9/8/2021	92561637001	GW	-	X	X	X	X	X	X	-	-
92561637	B-112D	9/9/2021	92561637002	GW	-	X	X	X	X	X	X	-	-
92561637	B-113D	9/9/2021	92561637003	GW	-	X	X	X	X	X	X	-	-
92561637	EB-6	9/8/2021	92561637004	GW	EB (B-113D)	X	X	X	X	X	X	-	-
92561607	B-105D	9/8/2021	92561607001	GW	-	-	-	-	-	-	-	X	X
92561607	B-112D	9/9/2021	92561607002	GW	-	-	-	-	-	-	-	X	X
92561607	B-113D	9/9/2021	92561607003	GW	-	-	-	-	-	-	-	X	X
92561607	EB-6	9/8/2021	92561607004	GW	EB (B-113D)	-	-	-	-	-	-	X	X
92561303	DGWC-40	9/14/2021	92561303001	GW	-	X	X	X	X	X	X	-	-
92561303	FB-4	9/14/2021	92561303002	WQ	FB (DGWC-40)	X	X	X	X	X	X	-	-
92561303	DGWC-38	9/15/2021	92561303003	GW	-	X	X	X	X	X	X	-	-
92561303	DGWC-37	9/16/2021	92561303004	GW	-	X	X	X	X	X	X	-	-
92561303	DGWC-39	9/17/2021	92561303005	GW	-	X	X	X	X	X	X	-	-
92561303	DGWC-67	9/16/2021	92561303006	GW	-	X	X	X	X	X	X	-	-
92561303	DGWC-68A	9/16/2021	92561303007	GW	-	X	X	X	X	X	X	-	-
92561303	DGWC-69	9/16/2021	92561303008	GW	-	X	X	X	X	X	X	-	-
92561303	DUP-6	9/16/2021	92561303009	GW	FD (DGWC-69)	X	X	X	X	X	X	-	-
92569178	DGWC-68A	10/27/2021	92569178001	GW	-	X	X	-	-	-	-	-	-
92569178	DUP-1	10/27/2021	92569178002	GW	FD (DGWC-68A)	X	X	-	-	-	-	-	-
92569178	FB-1	10/27/2021	92569178003	WQ	FB (DGWC-68A)	X	X	-	-	-	-	-	-
92569178	EB-1	10/27/2021	92569178004	WQ	EB (DGWC-68A)	X	X	-	-	-	-	-	-
92561311	DGWC-40	9/14/2021	92561311001	GW	-	-	-	-	-	-	-	X	X
92561311	FB-4	9/14/2021	92561311002	GW	FB (DGWC-40)	-	-	-	-	-	-	X	X
92561311	DGWC-38	9/15/2021	92561311003	GW	-	-	-	-	-	-	-	X	X
92561311	DGWC-37	9/16/2021	92561311004	GW	-	-	-	-	-	-	-	X	X
92561311	DGWC-39	9/17/2021	92561311005	GW	-	-	-	-	-	-	-	X	X
92561311	DGWC-67	9/16/2021	92561311006	GW	-	-	-	-	-	-	-	X	X
92561311	DGWC-68A	9/16/2021	92561311007	GW	-	-	-	-	-	-	-	X	X
92561311	DGWC-69	9/16/2021	92561311008	GW	-	-	-	-	-	-	-	X	X
92561311	DUP-6	9/16/2021	92561311009	GW	FD (DGWC-69)	X	X	-	-	-	-	-	-
92561195	B-100	9/13/2021	92561195001	GW	-	X	X	X	X	X	X	-	-
92561195	B-62	9/9/2021	92560768001	GW	-	X	X	X	X	X	X	-	-
92561190	B-100	9/13/2021	92561190001	GW	-	-	-	-	-	-	-	X	X
92561190	B-62	9/9/2021	92560765001	GW	-	-	-	-	-	-	-	X	X
92560138	DGWA-71	9/8/2021	92560138001	GW	-	X	X	X	X	X	X	-	-
92560138	DGWA-53	9/9/2021	92560138002	GW	-	X	X	X	X	X	X	-	-
92560138	DGWA-70A	9/9/2021	92560138003	GW	-	X	X	X	X	X	X	-	-
92560136	DGWA-71	9/8/2021	92560136001	GW	-	-	-	-	-	-	-	X	X
92560136	DGWA-53	9/9/2021	92560136002	GW	-	-	-	-	-	-	-	X	X
92560136	DGWA-70A	9/9/2021	92560136003	GW	-	-	-	-	-	-	-	X	X
92560139	B-117D	9/8/2021	92560139001	GW	-	X	X	X	X	X	X	-	-
92560139	B-118	9/8/2021	92560139002	GW	-	X	X	X	X	X	X	-	-
92560139	B-119D	9/8/2021	92560139003	GW	-	X	X	X	X	X	X	-	-
92560139	B-116D	9/9/2021	92560139004	GW	-	X	X	X	X	X	X	-	-
92560137	B-117D	9/8/2021	92560137001	GW	-	-	-	-	-	-	-	X	X
92560137	B-118	9/8/2021	92560137002	GW	-	-	-	-	-	-	-	X	X
92560137	B-119D	9/8/2021	92560137003	GW	-	-	-	-	-	-	-	X	X
92560137	B-116D	9/9/2021	92560137004	GW	-	-	-	-	-	-	-	X	X

Abbreviations:

- SDG- Sample Delivery Group
- QC - Quality Control
- SM - Standard Method
- SW - Solid Waste
- GW - Groundwater
- WQ - Water quality control
- TDS - Total dissolved solids

TABLE 2
Qualifier Summary Table
SCS Plant McDonough

SDG	Sample Name	Constituent	New Result	New RL or MDC	Qualifier	Reason
92561607	B-105D	Radium-228	-	1.62	U	Method blank detection
92561608	B-105D	Total Radium	-	-	J+	Method blank detection
92561607	B-113D	Radium-228	-	0.803	U	Equipment blank detection
92561303	DGWC-37	Fluoride	-	-	J+	MS/MSD outside acceptance criteria
92561303	DGWC-37	Sulfate	-	-	J-	MS/MSD outside acceptance criteria
92561303	DGWC-69	TDS	-	-	J	Lab duplicate outside acceptance criteria
92569178	DGWC-68A	Arsenic	0.005	-	U	Method, equipment, and field blank contamination
92561311	DGWC-40	Radium-228	-	1.61	U	Method and field blank detection
92561311	DGWC-40	Total Radium	-	1.8	U	Method and field blank detection
92561311	DGWC-38	Radium-228	-	1.83	U	Field blank detection
92561311	DGWC-38	Total Radium	-	-	J+	Field blank detection

Abbreviations:

RL : Reporting limit

MDC : Minimum detectable concentration

SDG : Sample delivery group

Qualifier

U: Non-detect

J+: estimated, bias high

J-: estimated, bias low

APPENDIX B

Laboratory Accreditation



COMMONWEALTH of VIRGINIA
Department of General Services

Division of Consolidated Laboratory Services

*600 North 5th Street
Richmond, Virginia 23219-3691
(804) 648-4480
FAX (804) 692-0416*

06/11/2021

Craig Tronzo
Pace Analytical Services, LLC - Asheville NC
2225 Riverside Drive
Asheville NC 28804

VELAP ID: 460222

Dear Craig Tronzo:

The Division of Consolidated Laboratory Services (DCLS) has accredited Pace Analytical Services, LLC - Asheville NC pursuant to the provisions of 1VAC30-46 and The NELAC Institute (TNI) 2009 Standard. Certificate number 11380 and the corresponding Scope of Accreditation are enclosed. This certificate expires 06/14/2022. The certificate must be conspicuously displayed in the laboratory along with the associated Scope of Accreditation.

Please note that your laboratory is required to notify the Virginia Environmental Laboratory Accreditation Program (VELAP) in writing of any changes in key accreditation criteria within 30 calendar days of the change per 1VAC30-46-90 A. This requirement includes changes in ownership, location, key personnel, and major instrumentation.

To maintain accreditation, the laboratory must continue to comply with 1VAC30-46. This includes ongoing satisfactory proficiency testing. The method checklists used by VELAP in the on-site assessment process are available upon request as a supplement to internal audits.

Please direct all correspondences and questions regarding accreditation to your laboratory's lead assessor, Ila Meyer-Fritzsche, at ila.meyer-fritzsche@dgs.virginia.gov or (804) 648-4480 x306.

Sincerely yours,

Cathy Westerman
Manager, Laboratory Certification Program

Enclosures
cc: Felicia Grogan



**COMMONWEALTH OF VIRGINIA
DEPARTMENT OF GENERAL SERVICES
DIVISION OF CONSOLIDATED LABORATORY SERVICES**



Certifies that

**VA Laboratory ID#: 460222
Pace Analytical Services, LLC - Asheville NC
2225 Riverside Drive
Asheville, NC 28804**

**Owner: PAS PARENT, LLC
Operator: PACE ANALYTICAL SERVICES, LLC
Responsible Official: FELICIA GROGAN**

Having met the requirements of 1 VAC 30-46 and
having been found compliant with the 2009 TNI Standard approved by The NELAC Institute
is hereby approved as an

Accredited Environmental Laboratory

As more fully described in the attached Scope of Accreditation

Effective Date: June 15, 2021

Expiration Date: June 14, 2022

Certificate # 11380

**Denise M. Toney, Ph.D., HCLD
DGS Deputy Director for Laboratories**

Continued accreditation status depends on successful ongoing participation in the program.
Certificate to be conspicuously displayed at the laboratory.
Not valid unless accompanied by a valid Virginia Environmental Laboratory Accreditation Program (VELAP)
Scope of Accreditation.
Customers are urged to verify the laboratory's current accreditation status.

Certificate Not Transferable

Surrender Upon Revocation



Commonwealth of Virginia
 Department of General Services
 Division of Consolidated Laboratory Services



Scope of Accreditation

VELAP Certificate No.: 11380

Pace Analytical Services, LLC - Asheville NC
 2225 Riverside Drive
 Asheville, NC 28804

Virginia Laboratory ID: 460222
 Effective Date: June 15, 2021
 Expiration Date: June 14, 2022

DRINKING WATER

<u>METHOD</u>	<u>ANALYTE</u>	<u>PRIMARY</u>
EPA 200.8 REV 5.4	COPPER	VA
EPA 353.2 REV 2 (AS LACHAT 10-107-04-1 A + C)	NITRATE AS N	VA
SM 2320 B-2011	ALKALINITY AS CaCO ₃	VA
SM 9223 COLISURE®	TOTAL COLIFORMS	VA

<u>METHOD</u>	<u>ANALYTE</u>	<u>PRIMARY</u>
EPA 200.8 REV 5.4	LEAD	VA
EPA 353.2 REV 2 (AS LACHAT 10-107-04-1-A)	NITRITE AS N	VA
SM 9223 COLISURE®	ESCHERICHIA COLI	VA

NON-POTABLE WATER

<u>METHOD</u>	<u>ANALYTE</u>	<u>PRIMARY</u>
EPA 1010 B	FLASHPOINT	VA
EPA 160.4	RESIDUE-VOLATILE	VA
EPA 180.1 REV 2	TURBIDITY	VA
EPA 200.7 REV 4.4	ANTIMONY	VA
EPA 200.7 REV 4.4	BARIUM	VA
EPA 200.7 REV 4.4	BORON	VA
EPA 200.7 REV 4.4	CALCIUM	VA
EPA 200.7 REV 4.4	COBALT	VA
EPA 200.7 REV 4.4	IRON	VA
EPA 200.7 REV 4.4	MAGNESIUM	VA
EPA 200.7 REV 4.4	MOLYBDENUM	VA
EPA 200.7 REV 4.4	POTASSIUM	VA
EPA 200.7 REV 4.4	SILICA AS SiO ₂	VA
EPA 200.7 REV 4.4	SODIUM	VA
EPA 200.7 REV 4.4	TIN	VA
EPA 200.7 REV 4.4	VANADIUM	VA
EPA 200.8 REV 5.4	ALUMINUM	VA
EPA 200.8 REV 5.4	ARSENIC	VA
EPA 200.8 REV 5.4	BERYLLIUM	VA
EPA 200.8 REV 5.4	CHROMIUM	VA
EPA 200.8 REV 5.4	COPPER	VA
EPA 200.8 REV 5.4	MANGANESE	VA
EPA 200.8 REV 5.4	NICKEL	VA
EPA 200.8 REV 5.4	SILVER	VA
EPA 200.8 REV 5.4	VANADIUM	VA
EPA 200.8 REV 5.4 - EXTENDED	BORON	VA
EPA 200.8 REV 5.4 - EXTENDED	IRON	VA
EPA 200.8 REV 5.4 - EXTENDED	POTASSIUM	VA

<u>METHOD</u>	<u>ANALYTE</u>	<u>PRIMARY</u>
EPA 120.1	CONDUCTIVITY	VA
EPA 1631 E	MERCURY	VA
EPA 200.7 REV 4.4	ALUMINUM	VA
EPA 200.7 REV 4.4	ARSENIC	VA
EPA 200.7 REV 4.4	BERYLLIUM	VA
EPA 200.7 REV 4.4	CADMIUM	VA
EPA 200.7 REV 4.4	CHROMIUM	VA
EPA 200.7 REV 4.4	COPPER	VA
EPA 200.7 REV 4.4	LEAD	VA
EPA 200.7 REV 4.4	MANGANESE	VA
EPA 200.7 REV 4.4	NICKEL	VA
EPA 200.7 REV 4.4	SELENIUM	VA
EPA 200.7 REV 4.4	SILVER	VA
EPA 200.7 REV 4.4	THALLIUM	VA
EPA 200.7 REV 4.4	TITANIUM	VA
EPA 200.7 REV 4.4	ZINC	VA
EPA 200.8 REV 5.4	ANTIMONY	VA
EPA 200.8 REV 5.4	BARIUM	VA
EPA 200.8 REV 5.4	CADMIUM	VA
EPA 200.8 REV 5.4	COBALT	VA
EPA 200.8 REV 5.4	LEAD	VA
EPA 200.8 REV 5.4	MOLYBDENUM	VA
EPA 200.8 REV 5.4	SELENIUM	VA
EPA 200.8 REV 5.4	THALLIUM	VA
EPA 200.8 REV 5.4	ZINC	VA
EPA 200.8 REV 5.4 - EXTENDED	CALCIUM	VA
EPA 200.8 REV 5.4 - EXTENDED	MAGNESIUM	VA
EPA 200.8 REV 5.4 - EXTENDED	SODIUM	VA

This Scope of Accreditation must accompany the Certificate issued by Virginia DCLS with the same Certificate Number indicated above.



Scope of Accreditation

VELAP Certificate No.: 11380

Pace Analytical Services, LLC - Asheville NC
 2225 Riverside Drive
 Asheville, NC 28804

Virginia Laboratory ID: 460222
 Effective Date: June 15, 2021
 Expiration Date: June 14, 2022

NON-POTABLE WATER

METHOD	ANALYTE	PRIMARY	METHOD	ANALYTE	PRIMARY
EPA 200.8 REV 5.4 - EXTENDED	TIN	VA	EPA 200.8 REV 5.4 - EXTENDED	TITANIUM	VA
EPA 218.6 REV 3.3	CHROMIUM VI	VA	EPA 245.1 REV 3	MERCURY	VA
EPA 300.0 REV 2.1	BROMIDE	VA	EPA 300.0 REV 2.1	CHLORIDE	VA
EPA 300.0 REV 2.1	FLUORIDE	VA	EPA 300.0 REV 2.1	NITRATE AS N	VA
EPA 300.0 REV 2.1	NITRATE/NITRITE	VA	EPA 300.0 REV 2.1	NITRITE AS N	VA
EPA 300.0 REV 2.1	SULFATE	VA	EPA 3005 A	PREP: ACID DIGESTION OF WATERS FOR TOTAL RECOVERABLE OR DISSOLVED METALS	VA
EPA 3010 A	PREP: ACID DIGESTION OF AQUEOUS SAMPLES AND EXTRACTS FOR TOTAL METALS	VA	EPA 350.1 REV 2	AMMONIAAS N	VA
EPA 351.2 MINUS EPA 350.1	ORGANIC NITROGEN	VA	EPA 351.2 REV 2 (AS LACHAT 10-107-06-2-D)	KJELDAHL NITROGEN - TOTAL (TKN)	VA
EPA 353.2 REV 2 (AS LACHAT 10-107-04-1 A + C)	NITRATE AS N	VA	EPA 353.2 REV 2 (AS LACHAT 10-107-04-1-A)	NITRATE/NITRITE	VA
EPA 353.2 REV 2 (AS LACHAT 10-107-04-1-A)	NITRITE AS N	VA	EPA 365.1 REV 2 (AS LACHAT 10-115-01-1-E)	PHOSPHORUS, TOTAL	VA
EPA 420.4 REV 1 (AS LACHAT 10-210-00-1-X)	TOTAL PHENOLICS	VA	EPA 6010 D	ALUMINUM	VA
EPA 6010 D	ANTIMONY	VA	EPA 6010 D	ARSENIC	VA
EPA 6010 D	BARIUM	VA	EPA 6010 D	BERYLLIUM	VA
EPA 6010 D	BORON	VA	EPA 6010 D	CADMIUM	VA
EPA 6010 D	CALCIUM	VA	EPA 6010 D	CHROMIUM	VA
EPA 6010 D	COBALT	VA	EPA 6010 D	COPPER	VA
EPA 6010 D	IRON	VA	EPA 6010 D	LEAD	VA
EPA 6010 D	LITHIUM	VA	EPA 6010 D	MAGNESIUM	VA
EPA 6010 D	MANGANESE	VA	EPA 6010 D	MOLYBDENUM	VA
EPA 6010 D	NICKEL	VA	EPA 6010 D	POTASSIUM	VA
EPA 6010 D	SELENIUM	VA	EPA 6010 D	SILICA AS SIO2	VA
EPA 6010 D	SILVER	VA	EPA 6010 D	SODIUM	VA
EPA 6010 D	STRONTIUM	VA	EPA 6010 D	THALLIUM	VA
EPA 6010 D	TIN	VA	EPA 6010 D	TITANIUM	VA
EPA 6010 D	VANADIUM	VA	EPA 6010 D	ZINC	VA
EPA 6010 D - EXTENDED	SILICON	VA	EPA 6020 B	ALUMINUM	VA
EPA 6020 B	ANTIMONY	VA	EPA 6020 B	ARSENIC	VA
EPA 6020 B	BARIUM	VA	EPA 6020 B	BERYLLIUM	VA
EPA 6020 B	CADMIUM	VA	EPA 6020 B	CALCIUM	VA
EPA 6020 B	CHROMIUM	VA	EPA 6020 B	COBALT	VA
EPA 6020 B	COPPER	VA	EPA 6020 B	IRON	VA
EPA 6020 B	LEAD	VA	EPA 6020 B	MAGNESIUM	VA

This Scope of Accreditation must accompany the Certificate issued by Virginia DCLS with the same Certificate Number indicated above.



Commonwealth of Virginia
 Department of General Services
 Division of Consolidated Laboratory Services



Scope of Accreditation

VELAP Certificate No.: 11380

Pace Analytical Services, LLC - Asheville NC
 2225 Riverside Drive
 Asheville, NC 28804

Virginia Laboratory ID: 460222
 Effective Date: June 15, 2021
 Expiration Date: June 14, 2022

NON-POTABLE WATER

<u>METHOD</u>	<u>ANALYTE</u>	<u>PRIMARY</u>
EPA 6020 B	MANGANESE	VA
EPA 6020 B	NICKEL	VA
EPA 6020 B	SELENIUM	VA
EPA 6020 B	SODIUM	VA
EPA 6020 B	TIN	VA
EPA 6020 B	ZINC	VA
EPA 6020 B - EXTENDED	BORON	VA
EPA 6020 B - EXTENDED	STRONTIUM	VA
EPA 6020 B - EXTENDED	URANIUM	VA
EPA 7470 A	MERCURY	VA
EPA 9012 B	AMENABLE CYANIDE	VA
EPA 9040 C	PH	VA
EPA 9056 A	CHLORIDE	VA
EPA 9056 A	NITRATE AS N	VA
EPA 9056 A	SULFATE	VA
EPA 9060 A	TOTAL ORGANIC CARBON (TOC)	VA
LACHAT QUIKCHEM 10-204-00-1-X	CYANIDE	VA
SM 2320 B-2011	ALKALINITY AS CaCO3	VA
SM 2540 B-2011	RESIDUE-TOTAL (TS)	VA
SM 2540 D-2011	RESIDUE-NONFILTERABLE (TSS)	VA
SM 3500-CR B-2011	CHROMIUM VI	VA
SM 4500-CN ⁻ E-2011	CYANIDE	VA
SM 4500-P E-2011	ORTHOPHOSPHATE AS P	VA
SM 5210 B-2011	BIOCHEMICAL OXYGEN DEMAND (BOD)	VA
SM 5220 D-2011	CHEMICAL OXYGEN DEMAND (COD)	VA

<u>METHOD</u>	<u>ANALYTE</u>	<u>PRIMARY</u>
EPA 6020 B	MOLYBDENUM	VA
EPA 6020 B	POTASSIUM	VA
EPA 6020 B	SILVER	VA
EPA 6020 B	THALLIUM	VA
EPA 6020 B	VANADIUM	VA
EPA 6020 B - EXTENDED	BISMUTH	VA
EPA 6020 B - EXTENDED	LITHIUM	VA
EPA 6020 B - EXTENDED	TITANIUM	VA
EPA 7196 A	CHROMIUM VI	VA
EPA 9010 C	PREP: CYANIDE DISTILLATION	VA
EPA 9012 B	TOTAL CYANIDE	VA
EPA 9056 A	BROMIDE	VA
EPA 9056 A	FLUORIDE	VA
EPA 9056 A	NITRITE AS N	VA
EPA 9056 A - EXTENDED	NITRATE/NITRITE	VA
EPA 9095 B	FREE LIQUID	VA
SM 2130 B-2011	TURBIDITY	VA
SM 2340 B-2011	TOTAL HARDNESS AS CaCO3	VA
SM 2540 C-2011	RESIDUE-FILTERABLE (TDS)	VA
SM 2540 F-2011	RESIDUE-SETTLABLE	VA
SM 4500-CL ⁻ E-2011	CHLORIDE	VA
SM 4500-CN ⁻ G-2011	AMENABLE CYANIDE	VA
SM 4500-S2 ⁻ D-2011	SULFIDE	VA
SM 5210 B-2011	CARBONACEOUS BOD (CBOD)	VA
SM 5310 B-2011	TOTAL ORGANIC CARBON (TOC)	VA

SOLID AND CHEMICAL MATERIALS

<u>METHOD</u>	<u>ANALYTE</u>	<u>PRIMARY</u>
EPA 1010 B	FLASHPOINT	VA
EPA 1312	PREP: SYNTHETIC PRECIPITATION LEACHING PROCEDURE	VA
EPA 3050 B	PREP: ACID DIGESTION OF SEDIMENTS, SLUDGES, AND SOILS	VA
EPA 6010 D	ANTIMONY	VA
EPA 6010 D	BARIUM	VA
EPA 6010 D	BORON	VA
EPA 6010 D	CALCIUM	VA

<u>METHOD</u>	<u>ANALYTE</u>	<u>PRIMARY</u>
EPA 1311	PREP: TOXICITY CHARACTERISTIC LEACHING PROCEDURE	VA
EPA 3010 A	PREP: ACID DIGESTION OF AQUEOUS SAMPLES AND EXTRACTS FOR TOTAL METALS	VA
EPA 6010 D	ALUMINUM	VA
EPA 6010 D	ARSENIC	VA
EPA 6010 D	BERYLLIUM	VA
EPA 6010 D	CADMIUM	VA
EPA 6010 D	CHROMIUM	VA

This Scope of Accreditation must accompany the Certificate issued by Virginia DCLS with the same Certificate Number indicated above.



Commonwealth of Virginia
 Department of General Services
 Division of Consolidated Laboratory Services



Scope of Accreditation

VELAP Certificate No.: 11380

Pace Analytical Services, LLC - Asheville NC
 2225 Riverside Drive
 Asheville, NC 28804

Virginia Laboratory ID: 460222
 Effective Date: June 15, 2021
 Expiration Date: June 14, 2022

SOLID AND CHEMICAL MATERIALS

<u>METHOD</u>	<u>ANALYTE</u>	<u>PRIMARY</u>
EPA 6010 D	COBALT	VA
EPA 6010 D	IRON	VA
EPA 6010 D	MAGNESIUM	VA
EPA 6010 D	MOLYBDENUM	VA
EPA 6010 D	POTASSIUM	VA
EPA 6010 D	SILVER	VA
EPA 6010 D	STRONTIUM	VA
EPA 6010 D	TITANIUM	VA
EPA 6010 D	ZINC	VA
EPA 7471 B	MERCURY	VA
EPA 9060	TOTAL ORGANIC CARBON (TOC)	VA
EPA 9095 B	FREE LIQUID	VA

<u>METHOD</u>	<u>ANALYTE</u>	<u>PRIMARY</u>
EPA 6010 D	COPPER	VA
EPA 6010 D	LEAD	VA
EPA 6010 D	MANGANESE	VA
EPA 6010 D	NICKEL	VA
EPA 6010 D	SELENIUM	VA
EPA 6010 D	SODIUM	VA
EPA 6010 D	THALLIUM	VA
EPA 6010 D	VANADIUM	VA
EPA 6010 D - EXTENDED	SILICON	VA
EPA 9045 D	PH	VA
EPA 9060 A	TOTAL ORGANIC CARBON (TOC)	VA



State of Florida
Department of Health, Bureau of Public Health Laboratories
This is to certify that



E87315

PACE ANALYTICAL SERVICES, LLC- ATLANTA GA
110 TECHNOLOGY PARKWAY
PEACHTREE CORNERS, GA 30092


has complied with Florida Administrative Code 64E-1,
for the examination of environmental samples in the following categories

DRINKING WATER - MICROBIOLOGY, DRINKING WATER - PRIMARY INORGANIC CONTAMINANTS, DRINKING WATER - SECONDARY INORGANIC CONTAMINANTS, NON-POTABLE WATER - GENERAL CHEMISTRY, NON-POTABLE WATER - METALS, NON-POTABLE WATER - MICROBIOLOGY, SOLID AND CHEMICAL MATERIALS - GENERAL CHEMISTRY, SOLID AND CHEMICAL MATERIALS - METALS, SOLID AND CHEMICAL MATERIALS - MICROBIOLOGY

Continued certification is contingent upon successful on-going compliance with the NELAC Standards and FAC Rule 64E-1 regulations. Specific methods and analytes certified are cited on the Laboratory Scope of Accreditation for this laboratory and are on file at the Bureau of Public Health Laboratories, P. O. Box 210, Jacksonville, Florida 32231. Clients and customers are urged to verify with this agency the laboratory's certification status in Florida for particular methods and analytes.

Date Issued: July 01, 2021 Expiration Date: June 30, 2022




Patty A. Lewandowski, MBA, MT(ASCP)
Chief Bureau of Public Health Laboratories
DH Form 1697, 7/04
NON-TRANSFERABLE E87315-52-07/01/2021
Supersedes all previously issued certificates



Laboratory Scope of Accreditation

Attachment to Certificate #: E87315-52, expiration date June 30, 2022. This listing of accredited analytes should be used only when associated with a valid certificate.

State Laboratory ID: **E87315**

EPA Lab Code: **GA00051**

(770) 734-4200

E87315

**Pace Analytical Services, LLC- Atlanta GA
110 Technology Parkway
Peachtree Corners, GA 30092**

Matrix: **Drinking Water**

Analyte	Method/Tech	Category	Certification Type	Effective Date
Color	SM 2120 B	Secondary Inorganic Contaminants	NELAP	4/10/2002
Escherichia coli	SM 9223 B	Microbiology	NELAP	4/10/2002
Escherichia coli	SM 9223 B /QUANTI-TRAY	Microbiology	NELAP	11/4/2010
Heterotrophic plate count	SIMPLATE	Microbiology	NELAP	5/29/2012
Nitrate	EPA 353.2	Primary Inorganic Contaminants	NELAP	4/17/2020
Nitrite	EPA 353.2	Primary Inorganic Contaminants	NELAP	4/17/2020
Orthophosphate as P	SM 4500-P E	Primary Inorganic Contaminants	NELAP	4/10/2002
pH	SM 4500-11+-B	Primary Inorganic Contaminants, Secondary Inorganic Contaminants	NELAP	4/10/2002
Residual free chlorine	SM 4500-Cl G	Primary Inorganic Contaminants	NELAP	11/4/2010
Total coliforms	SM 9223 B	Microbiology	NELAP	4/10/2002
Total coliforms	SM 9223 B /QUANTI-TRAY	Microbiology	NELAP	11/4/2010
Total nitrate-nitrite	EPA 353.2	Primary Inorganic Contaminants	NELAP	4/17/2020
Total residual chlorine	SM 4500-Cl G	Primary Inorganic Contaminants	NELAP	11/4/2010
Turbidity	EPA 180.1	Secondary Inorganic Contaminants	NELAP	4/10/2002



Laboratory Scope of Accreditation

Attachment to Certificate #: E87315-52, expiration date June 30, 2022. This listing of accredited analytes should be used only when associated with a valid certificate.

State Laboratory ID: E87315

EPA Lab Code: GA00051

(770) 734-4200

E87315

Pace Analytical Services, LLC- Atlanta GA

110 Technology Parkway

Peachtree Corners, GA 30092

Matrix: **Non-Potable Water**

Analyte	Method/Tech	Category	Certification Type	Effective Date
Aluminum	EPA 200.7	Metals	NELAP	4/10/2002
Aluminum	EPA 200.8	Metals	NELAP	8/30/2004
Aluminum	EPA 6010	Metals	NELAP	7/1/2003
Aluminum	EPA 6020	Metals	NELAP	8/30/2004
Antimony	EPA 200.7	Metals	NELAP	4/10/2002
Antimony	EPA 200.8	Metals	NELAP	8/30/2004
Antimony	EPA 6010	Metals	NELAP	7/1/2003
Antimony	EPA 6020	Metals	NELAP	8/30/2004
Arsenic	EPA 200.7	Metals	NELAP	4/10/2002
Arsenic	EPA 200.8	Metals	NELAP	8/30/2004
Arsenic	EPA 6010	Metals	NELAP	4/10/2002
Arsenic	EPA 6020	Metals	NELAP	8/30/2004
Barium	EPA 200.7	Metals	NELAP	4/10/2002
Barium	EPA 200.8	Metals	NELAP	8/30/2004
Barium	EPA 6010	Metals	NELAP	7/1/2003
Barium	EPA 6020	Metals	NELAP	8/30/2004
Beryllium	EPA 200.7	Metals	NELAP	4/10/2002
Beryllium	EPA 200.8	Metals	NELAP	8/30/2004
Beryllium	EPA 6010	Metals	NELAP	7/1/2003
Beryllium	EPA 6020	Metals	NELAP	8/30/2004
Biochemical oxygen demand	SM 5210 B	General Chemistry	NELAP	4/10/2002
Boron	EPA 200.7	Metals	NELAP	4/10/2002
Boron	EPA 200.8	Metals	NELAP	11/6/2014
Boron	EPA 6010	Metals	NELAP	7/1/2003
Boron	EPA 6020	Metals	NELAP	8/30/2004
Cadmium	EPA 200.7	Metals	NELAP	4/10/2002
Cadmium	EPA 200.8	Metals	NELAP	8/30/2004
Cadmium	EPA 6010	Metals	NELAP	4/10/2002
Cadmium	EPA 6020	Metals	NELAP	8/30/2004
Calcium	EPA 200.7	Metals	NELAP	4/10/2002
Calcium	EPA 200.8	Metals	NELAP	11/6/2014
Calcium	EPA 6010	Metals	NELAP	7/1/2003
Calcium	EPA 6020	Metals	NELAP	8/30/2004
Carbonaceous BOD (CBOD)	SM 5210 B	General Chemistry	NELAP	4/10/2002
Chromium	EPA 200.7	Metals	NELAP	4/10/2002
Chromium	EPA 200.8	Metals	NELAP	8/30/2004

Clients and Customers are urged to verify the laboratory's current certification status with the Environmental Laboratory Certification Program.

Issue Date: 7/1/2021

Expiration Date: 6/30/2022



Laboratory Scope of Accreditation

Attachment to Certificate #: E87315-S2, expiration date June 30, 2022. This listing of accredited analytes should be used only when associated with a valid certificate.

State Laboratory ID: E87315

EPA Lab Code: GA00051

(770) 734-4200

E87315

Pace Analytical Services, LLC- Atlanta GA
110 Technology Parkway
Peachtree Corners, GA 30092

Matrix: Non-Potable Water

Analyte	Method/Tech	Category	Certification Type	Effective Date
Chromium	EPA 6010	Metals	NELAP	7/1/2003
Chromium	EPA 6020	Metals	NELAP	8/30/2004
Chromium VI	SM 3500-Cr B (20th/21st/22nd Ed.)/UV-VIS	General Chemistry	NELAP	7/28/2009
Cobalt	EPA 200.7	Metals	NELAP	4/10/2002
Cobalt	EPA 200.8	Metals	NELAP	8/30/2004
Cobalt	EPA 6010	Metals	NELAP	7/1/2003
Cobalt	EPA 6020	Metals	NELAP	8/30/2004
Color	SM 2120 B	General Chemistry	NELAP	4/10/2002
Copper	EPA 200.7	Metals	NELAP	4/10/2002
Copper	EPA 200.8	Metals	NELAP	8/30/2004
Copper	EPA 6010	Metals	NELAP	4/10/2002
Copper	EPA 6020	Metals	NELAP	8/30/2004
Corrosivity (pH)	EPA 9040	General Chemistry	NELAP	7/1/2003
Escherichia coli	SM 9223 B AQUANTI-TRAY	Microbiology	NELAP	11/4/2010
Fecal coliforms	COLILERT®-18 (Fecal Coliforms)	Microbiology	NELAP	11/6/2014
Fecal coliforms	SM 9222 D	Microbiology	NELAP	2/21/2002
Hardness	SM 2340 B	General Chemistry	NELAP	7/28/2009
Hardness (calc.)	EPA 200.7	Metals	NELAP	6/6/2002
Heterotrophic plate count	SIMPLATE	Microbiology	NELAP	5/29/2012
Iron	EPA 200.7	Metals	NELAP	4/10/2002
Iron	EPA 200.8	Metals	NELAP	11/6/2014
Iron	EPA 6010	Metals	NELAP	7/1/2003
Iron	EPA 6020	Metals	NELAP	8/30/2004
Iron-(II) (Ferrous Iron)	SM 3500-Fe B (20th/21st Ed.)/UV-VIS	General Chemistry	NELAP	7/28/2009
Lead	EPA 200.7	Metals	NELAP	4/10/2002
Lead	EPA 200.8	Metals	NELAP	8/30/2004
Lead	EPA 6010	Metals	NELAP	4/10/2002
Lead	EPA 6020	Metals	NELAP	8/30/2004
Lithium	EPA 200.8	Metals	NELAP	10/6/2016
Lithium	EPA 6020	Metals	NELAP	10/6/2016
Magnesium	EPA 200.7	Metals	NELAP	4/10/2002
Magnesium	EPA 200.8	Metals	NELAP	11/6/2014
Magnesium	EPA 6010	Metals	NELAP	7/1/2003
Magnesium	EPA 6020	Metals	NELAP	8/30/2004

Clients and Customers are urged to verify the laboratory's current certification status with the Environmental Laboratory Certification Program.

Issue Date: 7/1/2021

Expiration Date: 6/30/2022



Laboratory Scope of Accreditation

Attachment to Certificate #: E87315-52, expiration date June 30, 2022. This listing of accredited analytes should be used only when associated with a valid certificate.

State Laboratory ID: E87315

EPA Lab Code: GA00051

(770) 734-4200

E87315

Price Analytical Services, LLC- Atlanta GA

110 Technology Parkway

Peachtree Corners, GA 30092

Matrix: Non-Potable Water

Analyte	Method/Tech	Category	Certification Type	Effective Date
Manganese	EPA 200.7	Metals	NELAP	4/10/2002
Manganese	EPA 200.8	Metals	NELAP	8/30/2004
Manganese	EPA 6010	Metals	NELAP	7/1/2003
Manganese	EPA 6020	Metals	NELAP	8/30/2004
Mercury	EPA 245.1	Metals	NELAP	4/10/2002
Mercury	EPA 7470	Metals	NELAP	4/10/2002
Molybdenum	EPA 200.7	Metals	NELAP	4/10/2002
Molybdenum	EPA 200.8	Metals	NELAP	8/30/2004
Molybdenum	EPA 6010	Metals	NELAP	4/10/2002
Molybdenum	EPA 6020	Metals	NELAP	8/30/2004
Nickel	EPA 200.7	Metals	NELAP	4/10/2002
Nickel	EPA 200.8	Metals	NELAP	8/30/2004
Nickel	EPA 6010	Metals	NELAP	4/10/2002
Nickel	EPA 6020	Metals	NELAP	8/30/2004
Nitrate as N	EPA 353.2	General Chemistry	NELAP	4/17/2020
Nitrate-nitric	EPA 353.2	General Chemistry	NELAP	4/17/2020
Nitrite as N	EPA 353.2	General Chemistry	NELAP	4/17/2020
Orthophosphate as P	SM 4500-P E	General Chemistry	NELAP	4/10/2002
Oxygen, dissolved	ASTM D888-09C	General Chemistry	NELAP	11/6/2014
Oxygen, dissolved	SM 4500-O G	General Chemistry	NELAP	4/10/2002
pH	EPA 9040	General Chemistry	NELAP	7/1/2003
pH	SM 4500-H+ B	General Chemistry	NELAP	10/15/2007
Phosphorus, total	EPA 200.7	Metals	NELAP	9/27/2002
Phosphorus, total	EPA 6010	Metals	NELAP	7/1/2003
Potassium	EPA 200.7	Metals	NELAP	4/10/2002
Potassium	EPA 200.8	Metals	NELAP	11/6/2014
Potassium	EPA 6010	Metals	NELAP	4/10/2002
Potassium	EPA 6020	Metals	NELAP	8/30/2004
Residual free chlorine	SM 4500-Cl G	General Chemistry	NELAP	11/4/2010
Residue-filterable (TDS)	SM 2540 C	General Chemistry	NELAP	10/15/2007
Residue-nonfilterable (TSS)	SM 2540 D	General Chemistry	NELAP	10/15/2007
Residue-settleable	SM 2540 F	General Chemistry	NELAP	10/15/2007
Selenium	EPA 200.7	Metals	NELAP	4/10/2002
Selenium	EPA 200.8	Metals	NELAP	8/30/2004
Selenium	EPA 6010	Metals	NELAP	4/10/2002
Selenium	EPA 6020	Metals	NELAP	8/30/2004

Clients and Customers are urged to verify the laboratory's current certification status with the Environmental Laboratory Certification Program.

Issue Date: 7/1/2021

Expiration Date: 6/30/2022



Laboratory Scope of Accreditation

Attachment to Certificate #: E87315-52, expiration date June 30, 2022. This listing of accredited analytes should be used only when associated with a valid certificate.

State Laboratory ID: E87315

EPA Lab Code: GA00051

(770) 734-4200

E87315
Pace Analytical Services, LLC- Atlanta GA
110 Technology Parkway
Peachtree Corners, GA 30092

Matrix: Non-Potable Water

Analyte	Method/Tech	Category	Certification Type	Effective Date
Silicon	EPA 200.7	Metals	NELAP	4/10/2002
Silicon	EPA 6010	Metals	NELAP	7/1/2003
Silver	EPA 200.7	Metals	NELAP	4/10/2002
Silver	EPA 200.8	Metals	NELAP	8/30/2004
Silver	EPA 6010	Metals	NELAP	7/1/2003
Silver	EPA 6020	Metals	NELAP	8/30/2004
Sodium	EPA 200.7	Metals	NELAP	4/10/2002
Sodium	EPA 200.8	Metals	NELAP	11/6/2014
Sodium	EPA 6010	Metals	NELAP	7/1/2003
Sodium	EPA 6020	Metals	NELAP	8/30/2004
Strontium	EPA 200.7	Metals	NELAP	9/27/2002
Strontium	EPA 6010	Metals	NELAP	7/1/2003
Strontium	EPA 6020	Metals	NELAP	8/30/2004
Thallium	EPA 200.7	Metals	NELAP	4/10/2002
Thallium	EPA 200.8	Metals	NELAP	8/30/2004
Thallium	EPA 6010	Metals	NELAP	7/1/2003
Thallium	EPA 6020	Metals	NELAP	8/30/2004
Tin	EPA 200.7	Metals	NELAP	4/10/2002
Tin	EPA 200.8	Metals	NELAP	11/6/2014
Tin	EPA 6010	Metals	NELAP	7/1/2003
Tin	EPA 6020	Metals	NELAP	8/30/2004
Titanium	EPA 200.7	Metals	NELAP	4/10/2002
Titanium	EPA 200.8	Metals	NELAP	11/6/2014
Titanium	EPA 6010	Metals	NELAP	7/1/2003
Titanium	EPA 6020	Metals	NELAP	8/30/2004
Total coliforms	SM 9223 B /QUANTI-TRAY	Microbiology	NELAP	11/4/2010
Total residual chlorine	SM 4500-Cl G	General Chemistry	NELAP	11/4/2010
Total, fixed, and volatile residue	SM 2540 G	General Chemistry	NELAP	9/27/2002
Turbidity	EPA 180.1	General Chemistry	NELAP	4/10/2002
Vanadium	EPA 200.7	Metals	NELAP	4/10/2002
Vanadium	EPA 200.8	Metals	NELAP	8/30/2004
Vanadium	EPA 6010	Metals	NELAP	7/1/2003
Vanadium	EPA 6020	Metals	NELAP	8/30/2004
Zinc	EPA 200.7	Metals	NELAP	4/10/2002
Zinc	EPA 200.8	Metals	NELAP	8/30/2004
Zinc	EPA 6010	Metals	NELAP	4/10/2002

Clients and Customers are urged to verify the laboratory's current certification status with the Environmental Laboratory Certification Program.

Issue Date: 7/1/2021

Expiration Date: 6/30/2022



Laboratory Scope of Accreditation

Attachment to Certificate #: E87315-52, expiration date June 30, 2022. This listing of accredited analytes should be used only when associated with a valid certificate.

State Laboratory ID: E87315 EPA Lab Code: GA00051 (770) 734-4200

E87315
Pace Analytical Services, LLC- Atlanta GA
110 Technology Parkway
Peachtree Corners, GA 30092

Matrix: Non-Potable Water

Analyte	Method/Tech	Category	Certification Type	Effective Date
Zinc	EPA 6020	Metals	NELAP	8/30/2004



Laboratory Scope of Accreditation

Attachment to Certificate #: E87315-52, expiration date June 30, 2022. This listing of accredited analytes should be used only when associated with a valid certificate.

State Laboratory ID: E87315

EPA Lab Code: GA00051

(770) 734-4200

E87315

Pace Analytical Services, LLC- Atlanta GA

110 Technology Parkway

Peachtree Corners, GA 30092

Matrix: Solid and Chemical Materials

Analyte	Method/Tech	Category	Certification Type	Effective Date
Aluminum	EPA 6010	Metals	NELAP	4/10/2002
Antimony	EPA 6010	Metals	NELAP	4/10/2002
Arsenic	EPA 6010	Metals	NELAP	4/10/2002
Barium	EPA 6010	Metals	NELAP	4/10/2002
Beryllium	EPA 6010	Metals	NELAP	4/10/2002
Boron	EPA 6010	Metals	NELAP	4/10/2002
Cadmium	EPA 6010	Metals	NELAP	4/10/2002
Calcium	EPA 6010	Metals	NELAP	4/10/2002
Chromium	EPA 6010	Metals	NELAP	4/10/2002
Cobalt	EPA 6010	Metals	NELAP	4/10/2002
Copper	EPA 6010	Metals	NELAP	4/10/2002
Fecal coliforms	SM 9222 D	Microbiology	NELAP	7/28/2009
Fixed Residue	SM 2540 G-2011	General Chemistry	NELAP	10/1/2020
Iron	EPA 6010	Metals	NELAP	4/10/2002
Lead	EPA 6010	Metals	NELAP	4/10/2002
Magnesium	EPA 6010	Metals	NELAP	4/10/2002
Manganese	EPA 6010	Metals	NELAP	4/10/2002
Mercury	EPA 7471	Metals	NELAP	4/10/2002
Molybdenum	EPA 6010	Metals	NELAP	4/10/2002
Nickel	EPA 6010	Metals	NELAP	4/10/2002
pH	EPA 9045	General Chemistry	NELAP	4/10/2002
Phosphorus, total	EPA 6010	Metals	NELAP	4/10/2002
Potassium	EPA 6010	Metals	NELAP	4/10/2002
Residue-total	SM 2540 G-2011	General Chemistry	NELAP	10/1/2020
Residue-volatile	SM 2540 G-2011	General Chemistry	NELAP	10/1/2020
Selenium	EPA 6010	Metals	NELAP	4/10/2002
Silicon	EPA 6010	Metals	NELAP	4/10/2002
Silver	EPA 6010	Metals	NELAP	4/10/2002
Sodium	EPA 6010	Metals	NELAP	7/9/2002
Strontium	EPA 6010	Metals	NELAP	4/10/2002
Thallium	EPA 6010	Metals	NELAP	4/10/2002
Tin	EPA 6010	Metals	NELAP	4/10/2002
Titanium	EPA 6010	Metals	NELAP	9/27/2002
Toxicity Characteristic Leaching Procedure (TCLP)	EPA 1311	General Chemistry	NELAP	4/10/2002
Vanadium	EPA 6010	Metals	NELAP	4/10/2002
Zinc	EPA 6010	Metals	NELAP	4/10/2002

Clients and Customers are urged to verify the laboratory's current certification status with the Environmental Laboratory Certification Program.

Issue Date: 7/1/2021

Expiration Date: 6/30/2022



APPENDIX C

Well Maintenance Repair Memorandum and Well Condition Assessment Forms

TECHNICAL MEMORANDUM

DATE February 9, 2022

TO Joju Abraham, PG
Southern Company Services

CC Ben Hodges, Georgia Power Company

FROM Golder Associates USA Inc.

PLANT MCDONOUGH ASH POND 1, ASH POND 2 AND ASH POND 3/4
WELL MAINTENANCE AND REPAIR DOCUMENTATION
GEORGIA POWER COMPANY

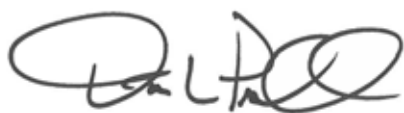
Golder Associates USA Inc. (Golder) has prepared this memorandum to provide documentation of groundwater monitoring well maintenance and/or repair performed at Plant McDonough Ash Pond 1, Ash Pond 2, and Ash Pond 3/4 during the semi-annual reporting period. Repairs and maintenance were completed in accordance with 12-5-134 (5)(D)vii of the Georgia Well Standards Act (1985) for routine visual inspections of groundwater monitoring wells (i.e., at least once every five years) under the direction of a Georgia licensed professional engineer or geologist.

Plant McDonough – Well Maintenance Summary

Well ID	Date Performed	Maintenance/Repair Performed
DGWA-53	October 2021	Cleared vegetation to improve access and visibility
DGWA-71	October 2021	Cleared vegetation to improve access and visibility. Replaced protective cover lid.
DGWC-2	October 2021	Replaced protective bollard.
DGWC-4	October 2021	Cleared vegetation to improve access and visibility
DGWC-5	October 2021	Cleared vegetation to improve access and visibility
DGWC-22	October 2021	Straighten protective bollard and added concrete to base.
DGWC-30	October 2021	Cleared vegetation to improve access and visibility
B-62	October 2021	Filled annular space with Portland/bentonite grout to approximately 5" from top of casing. Added pea gravel on top of grout.
B-63	October 2021	Repaired surface cracks in concrete pad with concrete resurface/fill
B-65	October 2021	Added concrete strap over the manhole cover for security.

Well ID	Date Performed	Maintenance/Repair Performed
B-87	October 2021	Cleared vegetation to improve access and visibility
B-88	October 2021	Cleared vegetation to improve access and visibility
B-94	October 2021	Cleared vegetation to improve access and visibility
B-95	October 2021	Replace concrete apron around flush mount protective cover. Updated survey is pending.
B-111	October 2021	Cleared vegetation to improve access and visibility
B-117D	October 2021	Cleared vegetation to improve access and visibility
B-3	October 2021	Cleared vegetation to improve access and visibility
B-120D	October 2021	Cleared vegetation to improve access and visibility
B-5	October 2021	Cleared vegetation to improve access and visibility
B-59	October 2021	Cleared vegetation to improve access and visibility; Straighten protective bollard.
DGWC-37	October 2021	Straighten protective bollard.
All wells	October 2021	Well Signs were confirmed and/or installed at all locations except for B-110D, B-112D and B-113D. These locations are flush mount wells located at the toe of AP1 dike. Signs will be replaced post construction.

Golder Associates USA Inc.



Dawn L. Prell
Senior Consultant, Hydrogeologist



Rachel P. Kirkman, PG
Senior Consultant, Principal

Attachments: Photo Documentation

[https://golderassociates.sharepoint.com/sites/11950g/shared documents/300_field information/2021/09_2021 sagw/mcd_well maintenance repair memo 2.2021.docx](https://golderassociates.sharepoint.com/sites/11950g/shared%20documents/300_field%20information/2021/09_2021_sagw/mcd_well_maintenance_repair_memo_2.2021.docx)

Southern Company CFS
Plant McDonough Oct 2021 Well O&M

AP1 – DGWA-53: Cleared overgrowth from around pad.



AP1 – DGWA-71: Cleared overgrowth from around pad. Removed cracked protective cover lid and replaced with a new lid.



Southern Company CFS
Plant McDonough Oct 2021 Well O&M



AP-2/3/4 – DGWC-2: Replaced front left bollard.



Southern Company CFS
Plant McDonough Oct 2021 Well O&M

AP-2/3/4 – DGWC-4: Cleared overgrowth from around pad.



AP-2/3/4 – DGWC-5: Cleared overgrowth from around pad.



Southern Company CFS Plant McDonough Oct 2021 Well O&M

AP-2/3/4 – DGWC-22: Straightened bollard and added additional concrete to base.

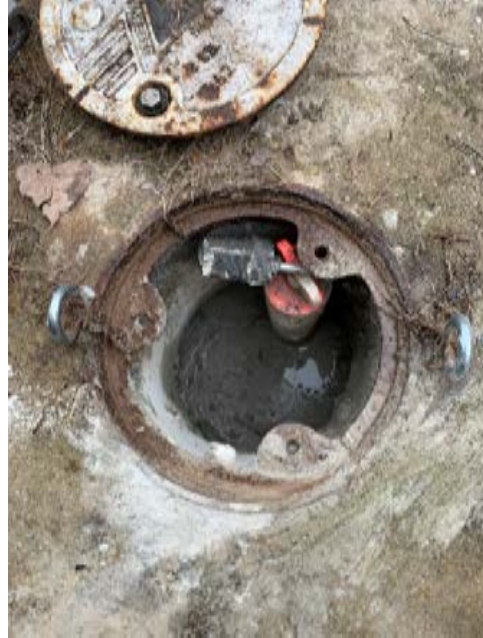


AP1 – DGWC-39: Cleared overgrowth from around pad.



Southern Company CFS Plant McDonough Oct 2021 Well O&M

AP-4 2/3/- B-62: Filled annular with Portland/Bentonite Grout and brought up to approx. 5" from top of casing. Added pea gravel to top of grout.

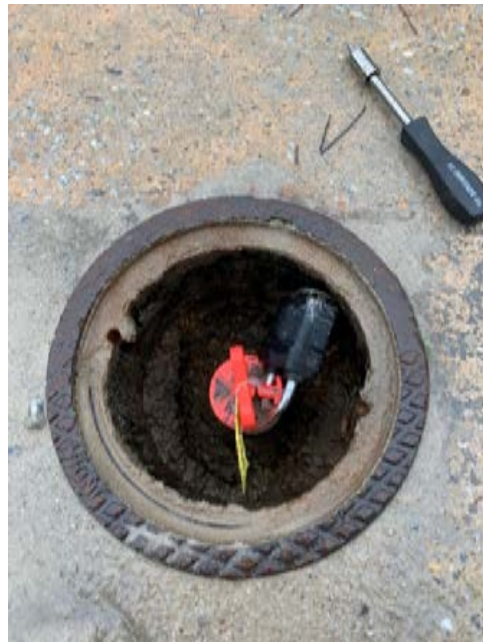


Southern Company CFS
Plant McDonough Oct 2021 Well O&M

AP-2/3/4 – B-63: Only surface cracks observed in pad. Used concrete resurface/fill to fill in superficial cracks.



AP4 – B-65: Bolt flange on inside of manhole broke due to concrete truck traffic at the Argos Batch Plant near AP4 fence. The only way to repair is to saw cut the manhole/pad out of concrete and replace. After discussing with ES&EE, decided to place a strap over top of the manhole cover to keep it in place. If truck traffic damages the strap, then full replacement may be required.



Southern Company CFS
Plant McDonough Oct 2021 Well O&M



AP-4 2/3/- B-68: Discharge pipe is coming from the Argos Concrete Batch Plant Washdown area. The pipe is owned by Argos. After discussing with ES&EE, CFS did not tamper with the pipe until GPC EA/ES&EE contact Argos about extending the pipe downgradient of B-68.



Southern Company CFS
Plant McDonough Oct 2021 Well O&M

AP-4 2/3/- B-87: Cleared overgrowth from around pad.



AP-4 2/3/- B-88: Cleared overgrowth from around pad.

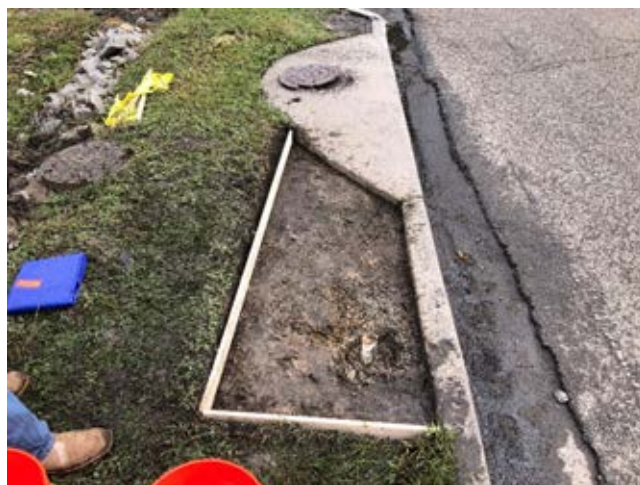


Southern Company CFS Plant McDonough Oct 2021 Well O&M

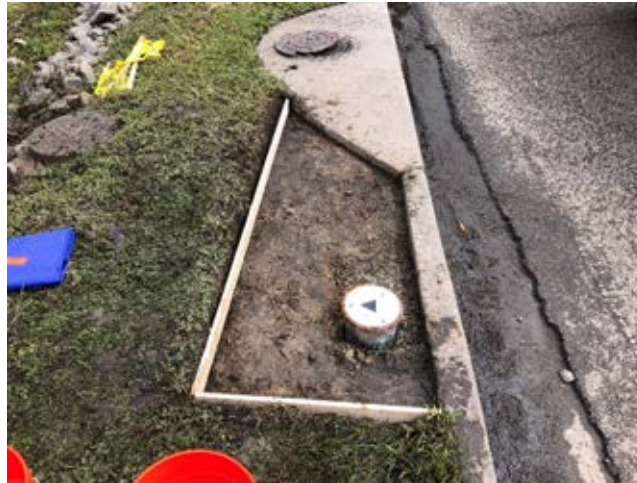
AP-4 2/3/- B-94: Cleared overgrowth from around pad.



AP-4 2/3/- B-95: Cracked pad due to truck traffic from Waste Management Facility. Appears that the manhole cover was pushed down which crushed the pad. The cover also contacted well cap and broke it. CFS removed the old pad/manhole and replaced. To lower the manhole closer to curb height to try to prevent the cover from being pushed down, CFS trimmed approx. 1' from the bottom of the manhole skirt. CFS also cut off the riser approx. 2" and replaced the well cap. The pad size was also increased, and rebar embedded in the concrete to strengthen and try to prevent the pad from cracking if it is run over again. Since CFS replaced the well cap, Golder will need to install a new cap lock as CFS was not able to transfer the lock over to the new cap. The well should also be resurveyed since the riser was cut off.



Southern Company CFS
Plant McDonough Oct 2021 Well O&M



Southern Company CFS
Plant McDonough Oct 2021 Well O&M



AP-4 2/3/- B-111D: Cleared overgrowth from around pad.



Southern Company CFS Plant McDonough Oct 2021 Well O&M

AP-4 2/3/- B-117D: Cleared overgrowth from around pad.



Additionally, all well signs that CFS was requested to procure, were installed during this O&M mobilization. All well signs were installed with the exception of B-110D, B-112D and B-113D. These are flush mount wells located at the toe of AP1 Dike. The ordered signs for these 3 wells were left in the SCS construction trailer, with the construction coordinator at the request of ES&EE.

Southern Company CFS Plant McDonough Oct 2021 Well O&M

While installing wells signs, additional wells that were observed needing maintenance where addressed:

B-3 – Clear overgrowth



B-120D – Clear Overgrowth



Southern Company CFS
Plant McDonough Oct 2021 Well O&M

B-5 – Clear Overgrowth



B-59 – Straighten bollard and clear overgrowth



Southern Company CFS
Plant McDonough Oct 2021 Well O&M

DGWC-37 – Straighten bollard



APPENDIX C

Well Inspection Forms

WELL INSPECTION FORM
PLANT MCDONOUGH

Well-ID	POSITION ↑ or ↓	LOCATION / IDENTIFICATION	PROTECTIVE CASING	SURFACE PAD	INTERNAL CASING	SAMPLING (Groundwater Wells Only)
		a. Visible and accessible b. Properly identified with correct ID c. Not in a high traffic area that requires traffic protection d. No standing water nearby, adequate surrounding drainage (S) for Satisfactory Discrepancies identified below	a. Free from damage, degradation, or deterioration b. Functioning weep hole c. Annular space free of debris and water, and has enough pea gravel d. Functioning lock and in good condition (S) for Satisfactory Discrepancies identified below	a. Pad & bollards in good condition b. Sloped away from the well c. In contact with protective casing d. Stable and in contact with ground surface e. Free of debris f. Survey pin clearly identified (S) for Satisfactory Discrepancies identified below	a. Cap prevents entry of foreign material b. Free of kinks or bends or any obstruction from foreign objects c. Weephole present and cap not too tight to allow equilibrium for air pressure d. Survey point clearly marked on the inner casing e. Sounded depth consistent with well log f. Stable/immobile (S) for Satisfactory Discrepancies identified below	a. Well recharges adequately when purged b. If dedicated sampling equipment installed, it is in good condition and specified in the approved groundwater plan for the facility c. Does not require redevelopment (S) for Satisfactory Discrepancies identified below
DGWA-53	↑	Overgrown	S	S	S	Poor recharge, requires purge dry and returning to sample
DGWA-70A	↑	S	S	S	S	S
DGWA-71	↑	Overgrown	Cracked Lid	S	S	S
DGWC-2	↓	S	S	Bollard knocked over	S	S
DGWC-4	↓	Overgrown	S	S	S	S
DGWC-5	↓	Overgrown	S	S	S	S
DGWC-8	↓	S	S	S	S	S
DGWC-9	↓	S	S	S	S	S
DGWC-10	↓	S	S	S	S	S
DGWC-11	↓	S	S	S	S	S
DGWC-12	↓	S	S	S	S	S
DGWC-13	↓	S	S	S	S	S
DGWC-14	↓	S	S	S	S	S
DGWC-15	↓	S	S	S	S	S
DGWC-17	↓	S	S	S	S	S
DGWC-19	↓	S	S	S	S	S
DGWC-20	↓	S	S	S	S	S
DGWC-21	↓	S	S	S	S	S
DGWC-22	↓	S	S	Bollard knocked over	S	S
DGWC-23	↓	S	S	S	S	S

WELL INSPECTION FORM
PLANT MCDONOUGH

Well-ID	POSITION ↑ or ↓	LOCATION / IDENTIFICATION	PROTECTIVE CASING	SURFACE PAD	INTERNAL CASING	SAMPLING (Groundwater Wells Only)
		a. Visible and accessible b. Properly identified with correct ID c. Not in a high traffic area that requires traffic protection d. No standing water nearby, adequate surrounding drainage (S) for Satisfactory Discrepancies identified below	a. Free from damage, degradation, or deterioration b. Functioning weep hole c. Annular space free of debris and water, and has enough pea gravel d. Functioning lock and in good condition (S) for Satisfactory Discrepancies identified below	a. Pad & bollards in good condition b. Sloped away from the well c. In contact with protective casing d. Stable and in contact with ground surface e. Free of debris f. Survey pin clearly identified (S) for Satisfactory Discrepancies identified below	a. Cap prevents entry of foreign material b. Free of kinks or bends or any obstruction from foreign objects c. Weephole present and cap not too tight to allow equilibrium for air pressure d. Survey point clearly marked on the inner casing e. Sounded depth consistent with well log f. Stable/immobile (S) for Satisfactory Discrepancies identified below	a. Well recharges adequately when purged b. If dedicated sampling equipment installed, it is in good condition and specified in the approved groundwater plan for the facility c. Does not require redevelopment (S) for Satisfactory Discrepancies identified below
DGWC-37	↓	In floodplain	S	S	S	S
DGWC-38	↓	S	S	S	S	S
DGWC-39	↓	Overgrown	S	S	S	S
DGWC-40	↓	S	S	S	S	S
DGWC-42	↓	S	S	S	S	S
DGWC-47	↓	S	S	S	S	S
DGWC-48	↓	S	S	S	S	S
DGWC-67	↓	In floodplain	S	S	S	S
DGWC-68A	↓	S	S	S	S	S
DGWC-69	↓	S	S	S	S	S
B-3	↓	S	S	S	S	S
B-6	↓	S	S	S	S	S
B-7	↓	S	S	S	S	S
B-16	↓	S	S	S	S	S
B-18	↓	S	S	S	S	S
B-24	↓	S	S	S	S	S
B-25	↓	S	S	S	S	S
B-26	↓	S	S	S	S	S
B-28	↓	S	S	S	S	S
B-29	↓	S	S	S	S	S

WELL INSPECTION FORM
PLANT MCDONOUGH

Well-ID	POSITION ↑ or ↓	LOCATION / IDENTIFICATION	PROTECTIVE CASING	SURFACE PAD	INTERNAL CASING	SAMPLING (Groundwater Wells Only)
		a. Visible and accessible b. Properly identified with correct ID c. Not in a high traffic area that requires traffic protection d. No standing water nearby, adequate surrounding drainage (S) for Satisfactory Discrepancies identified below	a. Free from damage, degradation, or deterioration b. Functioning weep hole c. Annular space free of debris and water, and has enough pea gravel d. Functioning lock and in good condition (S) for Satisfactory Discrepancies identified below	a. Pad & bollards in good condition b. Sloped away from the well c. In contact with protective casing d. Stable and in contact with ground surface e. Free of debris f. Survey pin clearly identified (S) for Satisfactory Discrepancies identified below	a. Cap prevents entry of foreign material b. Free of kinks or bends or any obstruction from foreign objects c. Weephole present and cap not too tight to allow equilibrium for air pressure d. Survey point clearly marked on the inner casing e. Sounded depth consistent with well log f. Stable/immobile (S) for Satisfactory Discrepancies identified below	a. Well recharges adequately when purged b. If dedicated sampling equipment installed, it is in good condition and specified in the approved groundwater plan for the facility c. Does not require redevelopment (S) for Satisfactory Discrepancies identified below
B-31	↓	S	S	S	S	S
B-41	↓	S	S	S	S	S
B-50	↓	S	S	S	S	S
B-51	↓	In floodplain	S	S	S	S
B-52	↓	S	S	S	S	S
B-54	↓	S	S	S	S	S
B-55	↓	S	S	S	S	S
B-56	↓	S	S	S	S	S
B-57	↓	S	S	S	S	S
B-58	↓	S	S	S	S	S
B-59	↓	S	S	S	S	S
B-60	↓	S	S	S	S	S
B-61	↓	S	S	S	S	S
B-62	↓	S	Bolts and washers replaced	S	Cave in - annular space	S
B-63	↓	S	S	Well pad cracked	S	S
B-64	↓	S	S	S	S	S
B-65	↓	S	S	Bolt intake broken	S	S
B-66	↓	S	S	S	S	S
B-68	↓	S	S	S	S	S
B-72	↓	In floodplain	S	S	S	S

WELL INSPECTION FORM
PLANT MCDONOUGH

Well-ID	POSITION ↑ or ↓	LOCATION / IDENTIFICATION	PROTECTIVE CASING	SURFACE PAD	INTERNAL CASING	SAMPLING (Groundwater Wells Only)
		a. Visible and accessible b. Properly identified with correct ID c. Not in a high traffic area that requires traffic protection d. No standing water nearby, adequate surrounding drainage (S) for Satisfactory Discrepancies identified below	a. Free from damage, degradation, or deterioration b. Functioning weep hole c. Annular space free of debris and water, and has enough pea gravel d. Functioning lock and in good condition (S) for Satisfactory Discrepancies identified below	a. Pad & bollards in good condition b. Sloped away from the well c. In contact with protective casing d. Stable and in contact with ground surface e. Free of debris f. Survey pin clearly identified (S) for Satisfactory Discrepancies identified below	a. Cap prevents entry of foreign material b. Free of kinks or bends or any obstruction from foreign objects c. Weephole present and cap not too tight to allow equilibrium for air pressure d. Survey point clearly marked on the inner casing e. Sounded depth consistent with well log f. Stable/immobile (S) for Satisfactory Discrepancies identified below	a. Well recharges adequately when purged b. If dedicated sampling equipment installed, it is in good condition and specified in the approved groundwater plan for the facility c. Does not require redevelopment (S) for Satisfactory Discrepancies identified below
B-73	↓	S	S	S	S	S
B-74	↓	S	S	S	S	S
B-76	↓	S	S	S	S	S
B-77	↓	Well ID replaced	S	S	S	S
B-78	↓	S	S	S	S	S
B-79	↓	S	S	S	S	S
B-80	↓	S	Pea gravel added	S	Weep hole added	S
B-81	↓	S	S	S	S	S
B-82	↓	Downgrade of discharge pipe	S	S	S	S
B-83	↓	S	Washers replaced	S	S	S
B-84	↓	Well ID replaced	Bolt replaced	S	S	S
B-85	↓	S	S	S	S	S
B-86	↓	S	S	S	S	S
B-87	↓	Overgrown	S	Overgrown	S	S
B-88	↓	Overgrown	S	Overgrown	S	S
B-89	↓	S	S	S	S	S
B-90	↓	Close to Road	S	S	S	S
B-91	↓	Close to Road	S	S	S	S
B-92	↓	Close to Road	S	S	S	S
B-93	↓	Close to Road	S	S	S	S

WELL INSPECTION FORM
PLANT MCDONOUGH

Well-ID	POSITION ↑ or ↓	LOCATION / IDENTIFICATION	PROTECTIVE CASING	SURFACE PAD	INTERNAL CASING	SAMPLING (Groundwater Wells Only)
		a. Visible and accessible b. Properly identified with correct ID c. Not in a high traffic area that requires traffic protection d. No standing water nearby, adequate surrounding drainage (S) for Satisfactory Discrepancies identified below	a. Free from damage, degradation, or deterioration b. Functioning weep hole c. Annular space free of debris and water, and has enough pea gravel d. Functioning lock and in good condition (S) for Satisfactory Discrepancies identified below	a. Pad & bollards in good condition b. Sloped away from the well c. In contact with protective casing d. Stable and in contact with ground surface e. Free of debris f. Survey pin clearly identified (S) for Satisfactory Discrepancies identified below	a. Cap prevents entry of foreign material b. Free of kinks or bends or any obstruction from foreign objects c. Weephole present and cap not too tight to allow equilibrium for air pressure d. Survey point clearly marked on the inner casing e. Sounded depth consistent with well log f. Stable/immobile (S) for Satisfactory Discrepancies identified below	a. Well recharges adequately when purged b. If dedicated sampling equipment installed, it is in good condition and specified in the approved groundwater plan for the facility c. Does not require redevelopment (S) for Satisfactory Discrepancies identified below
B-94	↓	Overgrown	S	S	S	S
B-95	↓	Close to Road	S	Cracked Pad	S	S
B-96	↓	Close to Road	S	S	S	S
B-97	↓	Close to Road	S	S	S	S
B-98	↓	Close to Road	S	S	S	S
B-99	↓	S	S	S	S	S
B-100	↓	S	S	S	S	S
B-101D	↓	S	S	S	S	S
B-102D	↓	S	S	S	S	S
B-103D	↓	S	S	S	S	S
B-104D	↓	S	S	S	S	S
B-105D	↓	S	S	S	S	S
B-106D	↓	S	S	S	S	S
B-107D	↓	S	S	S	S	S
B-108D	↓	S	S	S	S	S
B-109D	↓	S	Pea gravel added	S	S	S
B-110D	↓	S	Bolt replaced	S	S	S
B-111D	↓	Overgrown	S	S	S	S
B-112D	↓	S	S	S	S	S
B-113D	↓	In floodplain	S	S	S	S

WELL INSPECTION FORM
PLANT MCDONOUGH

Well-ID	POSITION ↑ or ↓	LOCATION / IDENTIFICATION	PROTECTIVE CASING	SURFACE PAD	INTERNAL CASING	SAMPLING (Groundwater Wells Only)
		a. Visible and accessible b. Properly identified with correct ID c. Not in a high traffic area that requires traffic protection d. No standing water nearby, adequate surrounding drainage (S) for Satisfactory Discrepancies identified below	a. Free from damage, degradation, or deterioration b. Functioning weep hole c. Annular space free of debris and water, and has enough pea gravel d. Functioning lock and in good condition (S) for Satisfactory Discrepancies identified below	a. Pad & bollards in good condition b. Sloped away from the well c. In contact with protective casing d. Stable and in contact with ground surface e. Free of debris f. Survey pin clearly identified (S) for Satisfactory Discrepancies identified below	a. Cap prevents entry of foreign material b. Free of kinks or bends or any obstruction from foreign objects c. Weephole present and cap not too tight to allow equilibrium for air pressure d. Survey point clearly marked on the inner casing e. Sounded depth consistent with well log f. Stable/immobile (S) for Satisfactory Discrepancies identified below	a. Well recharges adequately when purged b. If dedicated sampling equipment installed, it is in good condition and specified in the approved groundwater plan for the facility c. Does not require redevelopment (S) for Satisfactory Discrepancies identified below
B-115D	↓	S	S	S	S	S
B-116D	↑	S	S	S	S	S
B-117D	↑	Overgrown	S	S	S	S
B-118	↑	Well ID replaced	S	S	S	S
B-119D	↑	Well ID replaced	S	S	S	S
B-120D	↓	S	S	S	S	S
AP-1-B-3	IW	S	S	S	S	S
AP-1-B-7	IW	S	S	S	S	S
AP-1-B-8	IW	S	S	S	S	S
						S

NOTES:

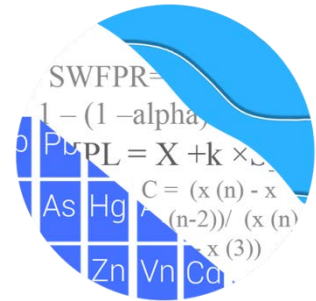
IW = Interstitial Well

1. Provide pictures of any deficiencies.
2. Notify SCS /GPC of any noted deficiencies.
3. Provide additional comments as necessary to address any deficiencies.
4. Indicates issue resolved 9/16/21

APPENDIX D

Statistical Analyses

GROUNDWATER STATS CONSULTING



February 28, 2022

Southern Company Services
Attn: Mr. Joju Abraham
241 Ralph McGill Blvd NE, Bin 10160
Atlanta, Georgia 30308-3374

Re: Plant McDonough Ash Pond (AP-1)
September 2021 Statistical Analysis

Dear Mr. Abraham,

Groundwater Stats Consulting, formerly the statistical consulting division of Sanitas Technologies, is pleased to provide the September 2021 Semi-Annual Groundwater Monitoring and Corrective Action Statistical summary of groundwater data for Georgia Power Company's Plant McDonough AP-1. The analysis complies with the federal rule for the Disposal of Coal Combustion Residuals from Electric Utilities (CCR Rule, 2015), the Georgia Environmental Protection Division Rules for Solid Waste Management Chapter 391-3-4-.10 and follows the United States Environmental Protection Agency (USEPA) Unified Guidance (2009).

Sampling for the Appendix III parameters began in 2016, and at least 8 background samples were collected at each of the groundwater monitoring wells. The delineation wells were installed at various times since 2020 and have limited data. Semi-annual sampling of the majority of Appendix IV constituents has been performed for the groundwater monitoring wells for several years in accordance with the Georgia Department of Natural Resources, Environmental Protection Division groundwater monitoring regulations. A list of all parameters is provided below.

The monitoring well network, as provided by Southern Company Services, consists of the following:

- **Upgradient wells:** DGWA-53, DGWA-70A, and DGWA-71
- **Downgradient wells:** DGWC-37, DGWC-38, DGWC-39, DGWC-40, DGWC-67, DGWC-68A, and DGWC-69
- **Delineation wells:** B-62, B-100, B-105D, B-112D, and B-113D

Data were sent electronically to Groundwater Stats Consulting, and the statistical analysis was reviewed by Kristina Rayner, Founder and Groundwater Statistician of Groundwater Stats Consulting. The analysis is prepared according to the recommended statistical methodology prepared in the Fall 2017 by Dr. Kirk Cameron, PhD Statistician with MacStat Consulting, primary author of the USEPA Unified Guidance.

The Coal Combustion Residual (CCR) program consists of the following constituents:

- **Appendix III** (Detection Monitoring) - boron, calcium, chloride, fluoride, pH, sulfate, and TDS
- **Appendix IV** (Assessment Monitoring) – antimony, arsenic, barium, beryllium, cadmium, chromium, cobalt, combined radium 226 + 228, fluoride, lead, lithium, mercury, molybdenum, selenium, and thallium

Note that when there are no detections present in downgradient wells for a given constituent, statistical analyses are not required. A summary of Appendix IV downgradient and delineation well/constituent pairs with 100% non-detects follows this letter.

Time series plots for Appendix III and IV parameters at all wells are provided for the purpose of screening data at these wells (Figure A). Additionally, a separate section of box plots is included for all constituents at upgradient and downgradient wells (Figure B). The time series plots are used to initially screen for suspected outliers and trends, while the box plots provide visual representation of variation within individual wells and between all wells. Note that due to flooding in well DGWC-68A during the September 2021 sample event, this well was, reportedly, re-developed and resamples were collected in October 2021 for arsenic, barium, chromium, cobalt, and pH. While the September 2021 reported results remain in the database for this well, these measurements were flagged as outliers. Values in background which have been flagged as outliers may be seen in a lighter font and as a disconnected symbol on the graphs. A summary of flagged outliers follows this report (Figure C).

In earlier analyses, data at all wells were evaluated for the following: 1) outliers; 2) trends; 3) most appropriate statistical method for Appendix III parameters based on site characteristics of groundwater data upgradient of the facility; and 4) eligibility of downgradient wells when intrawell statistical methods are recommended. Power curves

were provided with the previous screening to demonstrate that the selected statistical methods for Appendix III parameters comply with the USEPA Unified Guidance. The EPA suggests the selected statistical method should provide at least 55% power at 3 standard deviations or at least 80% power at 4 standard deviations.

Summary of Statistical Methods – Appendix III Parameters:

Based on the earlier evaluation described above, the following method was selected:

- Interwell prediction limits, combined with a 1-of-2 resample plan for boron, calcium, chloride, fluoride, pH, sulfate, and TDS

Parametric prediction limits are utilized when the screened historical data follow a normal or transformed-normal distribution. When data cannot be normalized or the majority of data are non-detects, a nonparametric test is utilized. While the false positive rate associated with the parametric limits is based on an annual 10% (5% per semi-annual event) as recommended by the EPA Unified Guidance (2009), the false positive rate associated with the nonparametric limits is dependent upon the available background sample size, number of future comparisons, and verification resample plan. The distribution of data is tested using the Shapiro-Wilk/Shapiro-Francia test for normality. After testing for normality and performing any adjustments as discussed below (US EPA, 2009), data are analyzed using either parametric or non-parametric prediction limits. Non-detects are handled as follows:

- No statistical analyses are required on wells and analytes containing 100% non-detects (USEPA Unified Guidance, 2009, Chapter 6).
- When data contain <15% non-detects in background, simple substitution of one-half the reporting limit is utilized in the statistical analysis. The reporting limit utilized for non-detects is the most recent practical quantification limit (PQL) as reported by the laboratory.
- When data contain between 15-50% non-detects, the Kaplan-Meier non-detect adjustment is applied to the background data. This technique adjusts the mean and standard deviation of the historical concentrations to account for concentrations below the reporting limit.
- Nonparametric prediction limits are used on data containing greater than 50% non-detects.

Natural systems continuously evolve due to physical changes made to the environment. Examples include capping a landfill, paving areas near a well, or lining a drainage channel to prevent erosion. Periodic updating of background statistical limits is necessary to

accommodate these types of changes. In the interwell case, prediction limits are updated with upgradient well data during each event after careful screening for any new outliers. In the intrawell case, data for all wells and constituents may be re-evaluated when a minimum of 4 new data points are available to determine whether earlier concentrations are representative of present-day groundwater quality. In some cases, the earlier portion of data are deselected prior to construction of limits to provide sensitive limits that will rapidly detect changes in groundwater quality. Even though the data are excluded from the calculation, the values will continue to be reported and shown in tables and graphs.

Summary of Background Screening – Conducted in March 2019

Outlier Analysis

Time series plots are used to identify suspected outliers, or extreme values that would result in limits that are not representative of the current background data population. Suspected outliers at all wells for Appendix III and Appendix IV parameters are formally tested using Tukey's box plot method and, when identified, flagged in the computer database with "o" and deselected prior to construction of statistical limits.

Using the Tukey box plot method, several outliers were identified, and the reports were submitted with the screening. In cases where the most recent value was identified as an outlier, values were not flagged in the database at that time as they may represent a future trend. If future values do not remain at similar concentrations, these values will be flagged as outliers and deselected. Several low values exist in the data sets and appear on the graphs as possible low outliers relative to the laboratory's Practical Quantitation Limit. However, these values are observed trace values (i.e. measurements reported by the laboratory between the Method Detection Limit and the Practical Quantitation Limit) and, therefore, were not flagged as outliers.

Of the outliers identified by Tukey's method, only a few of these values were flagged in the database as all other values are similar to remaining measurements within a given well or neighboring wells or were non-detects.

Additionally, when any values are flagged in the database as outliers, they are plotted in a disconnected and lighter symbol on the time series graph. The accompanying data pages display the flagged value in a lighter font as well. A substitution of the most recent reporting limit was applied when varying detection limits existed in data. When the reporting limit was higher than the Regional Screening Levels discussed below, non-detects were substituted with one half the reporting limit.

Seasonality

No obvious seasonal patterns were observed on the time series plots for any of the detected data; therefore, no deseasonalizing adjustments were made to the data. When seasonal patterns are observed, data may be deseasonalized so that the resulting limits will correctly account for the seasonality as a predictable pattern rather than random variation or a release.

Trend Test Evaluation

While trends may be identified by visual inspection, a quantification of the trend and its significance is needed. The Sen's Slope/Mann Kendall trend test was used to evaluate all data at each well to identify statistically significant increasing or decreasing trends. In the absence of suspected contamination, significant trending data are typically not included as part of the background data used for construction of prediction limits. This step serves to eliminate the trend and, thus, reduce variation in background. When statistically significant decreasing trends are present, all available data are evaluated to determine whether earlier concentration levels are significantly different than current reported concentrations and will be deselected as necessary. When any records of data are truncated for the reasons above, a summary report will be provided to show the date ranges used in construction of the statistical limits.

The results of the trend analyses were included with the previous screening and showed two statistically significant decreasing trends for the Appendix III parameters. The only trend identified in the upgradient wells was a statistically significant decreasing trend for sulfate in well DGWA-71. All trends noted were relatively low in magnitude when compared to average concentrations; therefore, no adjustments were made to the data sets.

Appendix III – Determination of Spatial Variation

The Analysis of Variance (ANOVA) was used to statistically evaluate differences in average concentrations among upgradient wells, which assists in identifying the most appropriate statistical approach. Interwell tests, which compare downgradient well data to statistical limits constructed from pooled upgradient well data, are appropriate when average concentrations are similar across upgradient wells. Intrawell tests, which compare compliance data from a single well to screened historical data within the same well, are appropriate when upgradient wells exhibit spatial variation; when statistical limits constructed from upgradient wells are not representative of the current background data

population; and when downgradient water quality is unimpacted compared to upgradient water quality for the same parameter.

The ANOVA identified no variation among upgradient well data for fluoride, making this constituent eligible for interwell analyses. Variation was noted for boron, calcium, chloride, pH, sulfate, and TDS which would indicate intrawell analyses may be most appropriate for these parameters. While data were further tested for intrawell eligibility during the screening, interwell methods will be used for all Appendix III constituents in accordance with Georgia EPD requirements.

Statistical Analysis of Appendix III Parameters – September 2021

Interwell Prediction Limits

Interwell prediction limits, combined with a 1-of-2 resample plan, were constructed using all historical upgradient well data through September 2021 (Figure D). Interwell prediction limits pool upgradient well data to establish a background limit for an individual constituent. The September 2021 sample event from each downgradient well is compared to the background limit to determine whether initial exceedances are present.

In the event of an initial exceedance of compliance well data, the 1-of-2 resample plan allows for collection of one additional sample to determine whether the initial exceedance is confirmed. When a resample confirms the initial exceedance, a statistically significant increase is identified, and further research would be required to identify the cause of the exceedance (i.e. impact from the site, natural variation, or an off-site source). If the resample falls within the statistical limit, the initial exceedance is considered to be a false positive result. Therefore, no exceedance is noted, and no further action is necessary. If no resample is collected, the original result is considered a confirmed exceedance. Several prediction limit exceedances were noted for Appendix III parameters. A summary table of the interwell prediction limits follows this letter. Note that the upper interwell prediction limit for pH at downgradient well DGWC-68A is equal to the reported concentration for this well when rounded to the same number of significant figures as the October 2021 sample.

Trend Test Evaluation – Appendix III

When prediction limit exceedances are identified in downgradient wells, data are further evaluated using the Sen's Slope/Mann Kendall trend test to determine whether concentrations are statistically increasing, decreasing, or stable (Figure E). Upgradient wells are included in the trend analyses for all parameters found to exceed their prediction

limit in downgradient wells. Similar patterns that are present in both upgradient and downgradient wells are an indication of natural variability in groundwater quality, unrelated to practices at the site. A summary of the trend test results follows this letter. Statistically significant trends were noted for the following well/constituent pairs:

Increasing trends:

- Chloride: DGWC-67

Decreasing trends:

- Calcium: DGWA-53 (upgradient)
- Chloride: DGWA-53 (upgradient) and DGWC-39
- Sulfate: DGWA-70A (upgradient), DGWA-71 (upgradient), and DGWC-39
- TDS: DGWA-53 (upgradient)

Statistical Analysis of Appendix IV Parameters – September 2021

For Appendix IV parameters, confidence intervals for each downgradient well/constituent were compared against corresponding Groundwater Protection Standards (GWPS). GWPS were developed as described below. Downgradient well/constituent pairs that have 100% non-detects do not require analysis. Data from all wells for Appendix IV parameters are reassessed for outliers during each analysis prior to constructing statistical limits. No new values were flagged during this analysis and a complete list of flagged outliers follows this report (Figure C).

Interwell Upper Tolerance Limits

Interwell upper tolerance limits were used to calculate site-specific background limits from all available pooled upgradient well data through September 2021 for Appendix IV constituents (Figure F). Parametric tolerance limits are used when data follow a normal or transformed-normal distribution such as for combined radium. When data contained greater than 50% non-detects or did not follow a normal or transformed-normal distribution, non-parametric tolerance limits were used.

Groundwater Protection Standards

The background limits were then used when determining the groundwater protection standard (GWPS) under 40 CFR §257.95(h) and Georgia EPD Rule 391-3-4-.10(6)(a).

As described in 40 CFR §257.95(h) (1-3), the GWPS is:

- The maximum contaminant level (MCL) established under §141.62 and §141.66 of this title
- Where an MCL has not been established for a constituent, CCR-rule specified level (RSLs) have been specified for cobalt (0.006 mg/L), lead (0.015 mg/L), lithium (0.040 mg/L), and molybdenum (0.100 mg/L)
- The respective background level for a constituent when the background level is higher than the MCL or Federal CCR Rule identified GWPS

On July 30, 2018, USEPA revised the Federal CCR rule updating GWPS for cobalt, lead, lithium, and molybdenum as described above in 40 CFR §257.95(h)(2). Georgia EPD has not incorporated the updated GWPS into the current Georgia EPD Rules for Solid Waste Management 391-3-4-.10(6)(a); therefore, for sites regulated under Georgia EPD Rules, the GWPS is:

- The MCL or
- The background concentration when an MCL is not established or when the background concentration is higher than the MCL.

Following the above Georgia EPD Rule requirements, GWPS were established for statistical comparison of Appendix IV constituents for the September 2021 sample event for the federal and state rules (Figures G and H).

Confidence Intervals

To complete the statistical comparison to GWPS, confidence intervals were constructed for each of the Appendix IV constituents in accordance with the federal and state requirements in each downgradient well (Figures I and J, respectively). Note that confidence intervals require a minimum of 4 samples and, in many cases, the delineation wells had insufficient samples at this time. The Sanitas software was used to calculate the tolerance limits and the confidence intervals. Due to the required transformations to fit the data to a transformed normal distribution, the lower confidence limit resulted in a negative number for barium, cobalt, combined radium, and at delineation well B-100. Therefore, non-parametric confidence intervals were constructed for these well/constituent pairs and may be found at the end of Figures I and J. This is a more conservative approach in that the lower confidence limit reflects the lowest reported measurement in the data set rather than a negative number.

Those confidence intervals were compared to the GWPS established using the CCR Rules for the federal requirements and the Georgia EPD Rules 391-3-4-.10(6)(a) for the State requirements. Only when the entire confidence interval is above a GWPS is the downgradient well/constituent pair considered to exceed its respective standard. If there is an exceedance of the GWPS, a statistically significant level (SSL) exceedance is identified. A summary of the confidence intervals follows this letter. Exceedances were noted for the following well/constituent pairs:

Federal & State:

- Arsenic: DGWC-69
- Cobalt: DGWC-40
- Molybdenum: DGWC-68A

Trend Test Evaluation – Appendix IV

Data at wells with confidence interval exceedances are further evaluated using the Sen's Slope/Mann Kendall trend test to determine whether concentrations are statistically increasing, decreasing, or stable (Figure K). Upgradient wells are included in the trend analyses for all parameters found to exceed their prediction limit in downgradient wells to identify whether similar patterns exist upgradient of the site. When trends are present in upgradient trends, it is an indication of natural variability in groundwater quality unrelated to practices at the site. A summary of the Appendix IV trend test results follows this letter. Statistically significant trends were identified for the following well/constituent pairs:

Increasing

- Cobalt: DGWC-40

Decreasing

- Cobalt: DGWA-53 (upgradient)

Thank you for the opportunity to assist you in the statistical analysis of groundwater quality for McDonough Ash Pond 1. If you have any questions or comments, please feel free to contact us.

For Groundwater Stats Consulting,



Andrew T. Collins
Project Manager



Kristina L. Rayner
Groundwater Statistician

100% Non-Detects: Appendix IV Downgradient & Delineation

Analysis Run 11/8/2021 10:25 AM View: AP 1 Confidence Intervals
Plant McDonough Client: Southern Company Data: McDonough AP

Antimony (mg/L)

DGWC-37, DGWC-38, DGWC-39

Arsenic (mg/L)

B-100, B-113D, B-62

Beryllium (mg/L)

DGWC-39, DGWC-67, B-105D, B-112D, B-113D

Cadmium (mg/L)

DGWC-39, B-105D, B-112D, B-62

Chromium (mg/L)

DGWC-39

Cobalt (mg/L)

B-113D

Fluoride, total (mg/L)

B-100

Lead (mg/L)

B-62

Lithium (mg/L)

DGWC-39

Mercury (mg/L)

B-112D, B-113D, B-62

Molybdenum (mg/L)

DGWC-37, DGWC-39, DGWC-40, DGWC-67, B-100, B-62

Selenium (mg/L)

DGWC-37, DGWC-39, DGWC-69, B-105D, B-112D, B-113D, B-62

Thallium (mg/L)

DGWC-37, DGWC-67, DGWC-69, B-100, B-105D, B-112D, B-113D, B-62

Appendix III Interwell Prediction Limits - Significant Results

Plant McDonough Client: Southern Company Data: McDonough AP Printed 12/16/2021, 2:18 PM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Boron, total (mg/L)	DGWC-37	0.13	n/a	9/16/2021	1.4	Yes	41	n/a	n/a	26.83	n/a	n/a	0.001085	NP Inter (normality) 1 of 2
Boron, total (mg/L)	DGWC-38	0.13	n/a	9/15/2021	2.8	Yes	41	n/a	n/a	26.83	n/a	n/a	0.001085	NP Inter (normality) 1 of 2
Boron, total (mg/L)	DGWC-39	0.13	n/a	9/17/2021	2.8	Yes	41	n/a	n/a	26.83	n/a	n/a	0.001085	NP Inter (normality) 1 of 2
Boron, total (mg/L)	DGWC-40	0.13	n/a	9/14/2021	0.7	Yes	41	n/a	n/a	26.83	n/a	n/a	0.001085	NP Inter (normality) 1 of 2
Boron, total (mg/L)	DGWC-67	0.13	n/a	9/16/2021	3.4	Yes	41	n/a	n/a	26.83	n/a	n/a	0.001085	NP Inter (normality) 1 of 2
Boron, total (mg/L)	DGWC-68A	0.13	n/a	9/16/2021	1.3	Yes	41	n/a	n/a	26.83	n/a	n/a	0.001085	NP Inter (normality) 1 of 2
Boron, total (mg/L)	DGWC-69	0.13	n/a	9/16/2021	0.32	Yes	41	n/a	n/a	26.83	n/a	n/a	0.001085	NP Inter (normality) 1 of 2
Calcium, total (mg/L)	DGWC-37	40.3	n/a	9/16/2021	63	Yes	41	n/a	n/a	4.878	n/a	n/a	0.001085	NP Inter (normality) 1 of 2
Calcium, total (mg/L)	DGWC-38	40.3	n/a	9/15/2021	88.3	Yes	41	n/a	n/a	4.878	n/a	n/a	0.001085	NP Inter (normality) 1 of 2
Calcium, total (mg/L)	DGWC-39	40.3	n/a	9/17/2021	98.6	Yes	41	n/a	n/a	4.878	n/a	n/a	0.001085	NP Inter (normality) 1 of 2
Calcium, total (mg/L)	DGWC-40	40.3	n/a	9/14/2021	45.1	Yes	41	n/a	n/a	4.878	n/a	n/a	0.001085	NP Inter (normality) 1 of 2
Calcium, total (mg/L)	DGWC-67	40.3	n/a	9/16/2021	46	Yes	41	n/a	n/a	4.878	n/a	n/a	0.001085	NP Inter (normality) 1 of 2
Calcium, total (mg/L)	DGWC-68A	40.3	n/a	9/16/2021	60.6	Yes	41	n/a	n/a	4.878	n/a	n/a	0.001085	NP Inter (normality) 1 of 2
Chloride, Total (mg/L)	DGWC-37	4.677	n/a	9/16/2021	5.6	Yes	43	0.9633	0.2952	0	None	ln(x)	0.001075	Param Inter 1 of 2
Chloride, Total (mg/L)	DGWC-38	4.677	n/a	9/15/2021	7.6	Yes	43	0.9633	0.2952	0	None	ln(x)	0.001075	Param Inter 1 of 2
Chloride, Total (mg/L)	DGWC-39	4.677	n/a	9/17/2021	8.3	Yes	43	0.9633	0.2952	0	None	ln(x)	0.001075	Param Inter 1 of 2
Chloride, Total (mg/L)	DGWC-40	4.677	n/a	9/14/2021	16.7	Yes	43	0.9633	0.2952	0	None	ln(x)	0.001075	Param Inter 1 of 2
Chloride, Total (mg/L)	DGWC-67	4.677	n/a	9/16/2021	7.9	Yes	43	0.9633	0.2952	0	None	ln(x)	0.001075	Param Inter 1 of 2
Fluoride, total (mg/L)	DGWC-68A	0.42	n/a	9/16/2021	0.55	Yes	48	n/a	n/a	52.08	n/a	n/a	0.0008146	NP Inter (NDs) 1 of 2
pH, Field (SU)	DGWC-40	6.556	5.244	9/14/2021	4.67	Yes	50	5.9	0.3378	0	None	No	0.0005373	Param Inter 1 of 2
pH, Field (SU)	DGWC-68A	6.556	5.244	10/27/2021	6.56	Yes	50	5.9	0.3378	0	None	No	0.0005373	Param Inter 1 of 2
Sulfate as SO4 (mg/L)	DGWC-37	28.94	n/a	9/16/2021	95	Yes	43	2.563	1.435	11.63	None	sqrt(x)	0.001075	Param Inter 1 of 2
Sulfate as SO4 (mg/L)	DGWC-38	28.94	n/a	9/15/2021	219	Yes	43	2.563	1.435	11.63	None	sqrt(x)	0.001075	Param Inter 1 of 2
Sulfate as SO4 (mg/L)	DGWC-39	28.94	n/a	9/17/2021	156	Yes	43	2.563	1.435	11.63	None	sqrt(x)	0.001075	Param Inter 1 of 2
Sulfate as SO4 (mg/L)	DGWC-40	28.94	n/a	9/14/2021	186	Yes	43	2.563	1.435	11.63	None	sqrt(x)	0.001075	Param Inter 1 of 2
Sulfate as SO4 (mg/L)	DGWC-67	28.94	n/a	9/16/2021	101	Yes	43	2.563	1.435	11.63	None	sqrt(x)	0.001075	Param Inter 1 of 2
Total Dissolved Solids [TDS] (mg/L)	DGWC-37	265.7	n/a	9/16/2021	278	Yes	42	4.572	0.9447	0	None	x^(1/3)	0.001075	Param Inter 1 of 2
Total Dissolved Solids [TDS] (mg/L)	DGWC-38	265.7	n/a	9/15/2021	474	Yes	42	4.572	0.9447	0	None	x^(1/3)	0.001075	Param Inter 1 of 2
Total Dissolved Solids [TDS] (mg/L)	DGWC-39	265.7	n/a	9/17/2021	446	Yes	42	4.572	0.9447	0	None	x^(1/3)	0.001075	Param Inter 1 of 2
Total Dissolved Solids [TDS] (mg/L)	DGWC-40	265.7	n/a	9/14/2021	347	Yes	42	4.572	0.9447	0	None	x^(1/3)	0.001075	Param Inter 1 of 2
Total Dissolved Solids [TDS] (mg/L)	DGWC-67	265.7	n/a	9/16/2021	282	Yes	42	4.572	0.9447	0	None	x^(1/3)	0.001075	Param Inter 1 of 2

Appendix III Interwell Prediction Limits - All Results

Plant McDonough Client: Southern Company Data: McDonough AP Printed 12/16/2021, 2:18 PM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Boron, total (mg/L)	DGWC-37	0.13	n/a	9/16/2021	1.4	Yes	41	n/a	n/a	26.83	n/a	n/a	0.001085	NP Inter (normality) 1 of 2
Boron, total (mg/L)	DGWC-38	0.13	n/a	9/15/2021	2.8	Yes	41	n/a	n/a	26.83	n/a	n/a	0.001085	NP Inter (normality) 1 of 2
Boron, total (mg/L)	DGWC-39	0.13	n/a	9/17/2021	2.8	Yes	41	n/a	n/a	26.83	n/a	n/a	0.001085	NP Inter (normality) 1 of 2
Boron, total (mg/L)	DGWC-40	0.13	n/a	9/14/2021	0.7	Yes	41	n/a	n/a	26.83	n/a	n/a	0.001085	NP Inter (normality) 1 of 2
Boron, total (mg/L)	DGWC-67	0.13	n/a	9/16/2021	3.4	Yes	41	n/a	n/a	26.83	n/a	n/a	0.001085	NP Inter (normality) 1 of 2
Boron, total (mg/L)	DGWC-68A	0.13	n/a	9/16/2021	1.3	Yes	41	n/a	n/a	26.83	n/a	n/a	0.001085	NP Inter (normality) 1 of 2
Boron, total (mg/L)	DGWC-69	0.13	n/a	9/16/2021	0.32	Yes	41	n/a	n/a	26.83	n/a	n/a	0.001085	NP Inter (normality) 1 of 2
Calcium, total (mg/L)	DGWC-37	40.3	n/a	9/16/2021	63	Yes	41	n/a	n/a	4.878	n/a	n/a	0.001085	NP Inter (normality) 1 of 2
Calcium, total (mg/L)	DGWC-38	40.3	n/a	9/15/2021	88.3	Yes	41	n/a	n/a	4.878	n/a	n/a	0.001085	NP Inter (normality) 1 of 2
Calcium, total (mg/L)	DGWC-39	40.3	n/a	9/17/2021	98.6	Yes	41	n/a	n/a	4.878	n/a	n/a	0.001085	NP Inter (normality) 1 of 2
Calcium, total (mg/L)	DGWC-40	40.3	n/a	9/14/2021	45.1	Yes	41	n/a	n/a	4.878	n/a	n/a	0.001085	NP Inter (normality) 1 of 2
Calcium, total (mg/L)	DGWC-67	40.3	n/a	9/16/2021	46	Yes	41	n/a	n/a	4.878	n/a	n/a	0.001085	NP Inter (normality) 1 of 2
Calcium, total (mg/L)	DGWC-68A	40.3	n/a	9/16/2021	60.6	Yes	41	n/a	n/a	4.878	n/a	n/a	0.001085	NP Inter (normality) 1 of 2
Calcium, total (mg/L)	DGWC-69	40.3	n/a	9/16/2021	18	No	41	n/a	n/a	4.878	n/a	n/a	0.001085	NP Inter (normality) 1 of 2
Chloride, Total (mg/L)	DGWC-37	4.677	n/a	9/16/2021	5.6	Yes	43	0.9633	0.2952	0	None	ln(x)	0.001075	Param Inter 1 of 2
Chloride, Total (mg/L)	DGWC-38	4.677	n/a	9/15/2021	7.6	Yes	43	0.9633	0.2952	0	None	ln(x)	0.001075	Param Inter 1 of 2
Chloride, Total (mg/L)	DGWC-39	4.677	n/a	9/17/2021	8.3	Yes	43	0.9633	0.2952	0	None	ln(x)	0.001075	Param Inter 1 of 2
Chloride, Total (mg/L)	DGWC-40	4.677	n/a	9/14/2021	16.7	Yes	43	0.9633	0.2952	0	None	ln(x)	0.001075	Param Inter 1 of 2
Chloride, Total (mg/L)	DGWC-67	4.677	n/a	9/16/2021	7.9	Yes	43	0.9633	0.2952	0	None	ln(x)	0.001075	Param Inter 1 of 2
Chloride, Total (mg/L)	DGWC-68A	4.677	n/a	9/16/2021	3.4	No	43	0.9633	0.2952	0	None	ln(x)	0.001075	Param Inter 1 of 2
Chloride, Total (mg/L)	DGWC-69	4.677	n/a	9/16/2021	4.5	No	43	0.9633	0.2952	0	None	ln(x)	0.001075	Param Inter 1 of 2
Fluoride, total (mg/L)	DGWC-37	0.42	n/a	9/16/2021	0.084J	No	48	n/a	n/a	52.08	n/a	n/a	0.0008146	NP Inter (NDs) 1 of 2
Fluoride, total (mg/L)	DGWC-38	0.42	n/a	9/15/2021	0.06J	No	48	n/a	n/a	52.08	n/a	n/a	0.0008146	NP Inter (NDs) 1 of 2
Fluoride, total (mg/L)	DGWC-39	0.42	n/a	9/17/2021	0.13	No	48	n/a	n/a	52.08	n/a	n/a	0.0008146	NP Inter (NDs) 1 of 2
Fluoride, total (mg/L)	DGWC-40	0.42	n/a	9/14/2021	0.13	No	48	n/a	n/a	52.08	n/a	n/a	0.0008146	NP Inter (NDs) 1 of 2
Fluoride, total (mg/L)	DGWC-67	0.42	n/a	9/16/2021	0.069J	No	48	n/a	n/a	52.08	n/a	n/a	0.0008146	NP Inter (NDs) 1 of 2
Fluoride, total (mg/L)	DGWC-68A	0.42	n/a	9/16/2021	0.55	Yes	48	n/a	n/a	52.08	n/a	n/a	0.0008146	NP Inter (NDs) 1 of 2
Fluoride, total (mg/L)	DGWC-69	0.42	n/a	9/16/2021	0.11	No	48	n/a	n/a	52.08	n/a	n/a	0.0008146	NP Inter (NDs) 1 of 2
pH, Field (SU)	DGWC-37	6.556	5.244	9/16/2021	6.33	No	50	5.9	0.3378	0	None	No	0.0005373	Param Inter 1 of 2
pH, Field (SU)	DGWC-38	6.556	5.244	9/15/2021	6.08	No	50	5.9	0.3378	0	None	No	0.0005373	Param Inter 1 of 2
pH, Field (SU)	DGWC-39	6.556	5.244	9/17/2021	6.49	No	50	5.9	0.3378	0	None	No	0.0005373	Param Inter 1 of 2
pH, Field (SU)	DGWC-40	6.556	5.244	9/14/2021	4.67	Yes	50	5.9	0.3378	0	None	No	0.0005373	Param Inter 1 of 2
pH, Field (SU)	DGWC-67	6.556	5.244	9/16/2021	6.2	No	50	5.9	0.3378	0	None	No	0.0005373	Param Inter 1 of 2
pH, Field (SU)	DGWC-68A	6.556	5.244	10/27/2021	6.56	Yes	50	5.9	0.3378	0	None	No	0.0005373	Param Inter 1 of 2
pH, Field (SU)	DGWC-69	6.556	5.244	9/16/2021	6.16	No	50	5.9	0.3378	0	None	No	0.0005373	Param Inter 1 of 2
Sulfate as SO4 (mg/L)	DGWC-37	28.94	n/a	9/16/2021	95	Yes	43	2.563	1.435	11.63	None	sqrt(x)	0.001075	Param Inter 1 of 2
Sulfate as SO4 (mg/L)	DGWC-38	28.94	n/a	9/15/2021	219	Yes	43	2.563	1.435	11.63	None	sqrt(x)	0.001075	Param Inter 1 of 2
Sulfate as SO4 (mg/L)	DGWC-39	28.94	n/a	9/17/2021	156	Yes	43	2.563	1.435	11.63	None	sqrt(x)	0.001075	Param Inter 1 of 2
Sulfate as SO4 (mg/L)	DGWC-40	28.94	n/a	9/14/2021	186	Yes	43	2.563	1.435	11.63	None	sqrt(x)	0.001075	Param Inter 1 of 2
Sulfate as SO4 (mg/L)	DGWC-67	28.94	n/a	9/16/2021	101	Yes	43	2.563	1.435	11.63	None	sqrt(x)	0.001075	Param Inter 1 of 2
Sulfate as SO4 (mg/L)	DGWC-68A	28.94	n/a	9/16/2021	22.3	No	43	2.563	1.435	11.63	None	sqrt(x)	0.001075	Param Inter 1 of 2
Sulfate as SO4 (mg/L)	DGWC-69	28.94	n/a	9/16/2021	17.9	No	43	2.563	1.435	11.63	None	sqrt(x)	0.001075	Param Inter 1 of 2
Total Dissolved Solids [TDS] (mg/L)	DGWC-37	265.7	n/a	9/16/2021	278	Yes	42	4.572	0.9447	0	None	x^(1/3)	0.001075	Param Inter 1 of 2
Total Dissolved Solids [TDS] (mg/L)	DGWC-38	265.7	n/a	9/15/2021	474	Yes	42	4.572	0.9447	0	None	x^(1/3)	0.001075	Param Inter 1 of 2
Total Dissolved Solids [TDS] (mg/L)	DGWC-39	265.7	n/a	9/17/2021	446	Yes	42	4.572	0.9447	0	None	x^(1/3)	0.001075	Param Inter 1 of 2
Total Dissolved Solids [TDS] (mg/L)	DGWC-40	265.7	n/a	9/14/2021	347	Yes	42	4.572	0.9447	0	None	x^(1/3)	0.001075	Param Inter 1 of 2
Total Dissolved Solids [TDS] (mg/L)	DGWC-67	265.7	n/a	9/16/2021	282	Yes	42	4.572	0.9447	0	None	x^(1/3)	0.001075	Param Inter 1 of 2
Total Dissolved Solids [TDS] (mg/L)	DGWC-68A	265.7	n/a	9/16/2021	259	No	42	4.572	0.9447	0	None	x^(1/3)	0.001075	Param Inter 1 of 2
Total Dissolved Solids [TDS] (mg/L)	DGWC-69	265.7	n/a	9/16/2021	113	No	42	4.572	0.9447	0	None	x^(1/3)	0.001075	Param Inter 1 of 2

Appendix III Trend Tests - Prediction Limits Exceedances - Significant Results

Plant McDonough Client: Southern Company Data: McDonough AP Printed 12/16/2021, 2:24 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Calcium, total (mg/L)	DGWA-53 (bg)	-4.533	-57	-48	Yes	14	0	n/a	n/a	0.01	NP
Chloride, Total (mg/L)	DGWA-53 (bg)	-0.1941	-59	-53	Yes	15	0	n/a	n/a	0.01	NP
Chloride, Total (mg/L)	DGWC-39	-0.263	-53	-48	Yes	14	0	n/a	n/a	0.01	NP
Chloride, Total (mg/L)	DGWC-67	0.4926	71	48	Yes	14	0	n/a	n/a	0.01	NP
Sulfate as SO4 (mg/L)	DGWA-70A (bg)	-0.2582	-50	-48	Yes	14	35.71	n/a	n/a	0.01	NP
Sulfate as SO4 (mg/L)	DGWA-71 (bg)	-1.564	-72	-48	Yes	14	0	n/a	n/a	0.01	NP
Sulfate as SO4 (mg/L)	DGWC-39	-25.51	-57	-48	Yes	14	0	n/a	n/a	0.01	NP
Total Dissolved Solids [TDS] (mg/L)	DGWA-53 (bg)	-26.59	-62	-48	Yes	14	0	n/a	n/a	0.01	NP

Appendix III Trend Tests - Prediction Limits Exceedances - All Results

Plant McDonough Client: Southern Company Data: McDonough AP Printed 12/16/2021, 2:24 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Boron, total (mg/L)	DGWA-53 (bg)	-0.002041	-16	-48	No	14	0	n/a	n/a	0.01	NP
Boron, total (mg/L)	DGWA-70A (bg)	0	14	48	No	14	57.14	n/a	n/a	0.01	NP
Boron, total (mg/L)	DGWA-71 (bg)	0	-2	-43	No	13	23.08	n/a	n/a	0.01	NP
Boron, total (mg/L)	DGWC-37	-0.08919	-35	-48	No	14	0	n/a	n/a	0.01	NP
Boron, total (mg/L)	DGWC-38	-0.03951	-20	-48	No	14	0	n/a	n/a	0.01	NP
Boron, total (mg/L)	DGWC-39	-0.1094	-41	-48	No	14	0	n/a	n/a	0.01	NP
Boron, total (mg/L)	DGWC-40	-0.03842	-48	-48	No	14	0	n/a	n/a	0.01	NP
Boron, total (mg/L)	DGWC-67	0.0544	26	48	No	14	0	n/a	n/a	0.01	NP
Boron, total (mg/L)	DGWC-68A	-0.1038	-42	-48	No	14	0	n/a	n/a	0.01	NP
Boron, total (mg/L)	DGWC-69	-0.06702	-48	-58	No	16	0	n/a	n/a	0.01	NP
Calcium, total (mg/L)	DGWA-53 (bg)	-4.533	-57	-48	Yes	14	0	n/a	n/a	0.01	NP
Calcium, total (mg/L)	DGWA-70A (bg)	-0.1515	-29	-48	No	14	7.143	n/a	n/a	0.01	NP
Calcium, total (mg/L)	DGWA-71 (bg)	-0.6883	-36	-43	No	13	7.692	n/a	n/a	0.01	NP
Calcium, total (mg/L)	DGWC-37	0.5433	10	48	No	14	0	n/a	n/a	0.01	NP
Calcium, total (mg/L)	DGWC-38	3.389	43	48	No	14	0	n/a	n/a	0.01	NP
Calcium, total (mg/L)	DGWC-39	0.8605	15	48	No	14	0	n/a	n/a	0.01	NP
Calcium, total (mg/L)	DGWC-40	0.9025	32	48	No	14	0	n/a	n/a	0.01	NP
Calcium, total (mg/L)	DGWC-67	0.776	31	48	No	14	0	n/a	n/a	0.01	NP
Calcium, total (mg/L)	DGWC-68A	0.9653	37	48	No	14	0	n/a	n/a	0.01	NP
Chloride, Total (mg/L)	DGWA-53 (bg)	-0.1941	-59	-53	Yes	15	0	n/a	n/a	0.01	NP
Chloride, Total (mg/L)	DGWA-70A (bg)	-0.08417	-33	-48	No	14	0	n/a	n/a	0.01	NP
Chloride, Total (mg/L)	DGWA-71 (bg)	0.07636	12	48	No	14	0	n/a	n/a	0.01	NP
Chloride, Total (mg/L)	DGWC-37	-0.1431	-42	-48	No	14	0	n/a	n/a	0.01	NP
Chloride, Total (mg/L)	DGWC-38	0.1365	29	48	No	14	0	n/a	n/a	0.01	NP
Chloride, Total (mg/L)	DGWC-39	-0.263	-53	-48	Yes	14	0	n/a	n/a	0.01	NP
Chloride, Total (mg/L)	DGWC-40	-0.1993	-32	-48	No	14	0	n/a	n/a	0.01	NP
Chloride, Total (mg/L)	DGWC-67	0.4926	71	48	Yes	14	0	n/a	n/a	0.01	NP
Fluoride, total (mg/L)	DGWA-53 (bg)	-0.001259	-9	-63	No	17	11.76	n/a	n/a	0.01	NP
Fluoride, total (mg/L)	DGWA-70A (bg)	0.01092	48	53	No	15	66.67	n/a	n/a	0.01	NP
Fluoride, total (mg/L)	DGWA-71 (bg)	0	32	58	No	16	81.25	n/a	n/a	0.01	NP
Fluoride, total (mg/L)	DGWC-68A	-0.01382	-57	-58	No	16	6.25	n/a	n/a	0.01	NP
pH, Field (SU)	DGWA-53 (bg)	0.02897	13	63	No	17	0	n/a	n/a	0.01	NP
pH, Field (SU)	DGWA-70A (bg)	-0.02535	-22	-58	No	16	0	n/a	n/a	0.01	NP
pH, Field (SU)	DGWA-71 (bg)	0.03005	28	63	No	17	0	n/a	n/a	0.01	NP
pH, Field (SU)	DGWC-40	-0.02032	-21	-58	No	16	0	n/a	n/a	0.01	NP
pH, Field (SU)	DGWC-68A	-0.007008	-16	-58	No	16	0	n/a	n/a	0.01	NP
Sulfate as SO4 (mg/L)	DGWA-53 (bg)	-1.708	-31	-53	No	15	0	n/a	n/a	0.01	NP
Sulfate as SO4 (mg/L)	DGWA-70A (bg)	-0.2582	-50	-48	Yes	14	35.71	n/a	n/a	0.01	NP
Sulfate as SO4 (mg/L)	DGWA-71 (bg)	-1.564	-72	-48	Yes	14	0	n/a	n/a	0.01	NP
Sulfate as SO4 (mg/L)	DGWC-37	-3.418	-37	-43	No	13	0	n/a	n/a	0.01	NP
Sulfate as SO4 (mg/L)	DGWC-38	-9.784	-40	-48	No	14	0	n/a	n/a	0.01	NP
Sulfate as SO4 (mg/L)	DGWC-39	-25.51	-57	-48	Yes	14	0	n/a	n/a	0.01	NP
Sulfate as SO4 (mg/L)	DGWC-40	-9.852	-42	-48	No	14	0	n/a	n/a	0.01	NP
Sulfate as SO4 (mg/L)	DGWC-67	-0.2466	-14	-48	No	14	0	n/a	n/a	0.01	NP
Total Dissolved Solids [TDS] (mg/L)	DGWA-53 (bg)	-26.59	-62	-48	Yes	14	0	n/a	n/a	0.01	NP
Total Dissolved Solids [TDS] (mg/L)	DGWA-70A (bg)	-1.029	-7	-48	No	14	0	n/a	n/a	0.01	NP
Total Dissolved Solids [TDS] (mg/L)	DGWA-71 (bg)	-5.605	-39	-48	No	14	0	n/a	n/a	0.01	NP
Total Dissolved Solids [TDS] (mg/L)	DGWC-37	-4.604	-23	-48	No	14	0	n/a	n/a	0.01	NP
Total Dissolved Solids [TDS] (mg/L)	DGWC-38	2.895	9	48	No	14	0	n/a	n/a	0.01	NP
Total Dissolved Solids [TDS] (mg/L)	DGWC-39	-15.12	-39	-48	No	14	0	n/a	n/a	0.01	NP
Total Dissolved Solids [TDS] (mg/L)	DGWC-40	-0.1363	0	43	No	13	0	n/a	n/a	0.01	NP
Total Dissolved Solids [TDS] (mg/L)	DGWC-67	-3.971	-11	-48	No	14	0	n/a	n/a	0.01	NP

Upper Tolerance Limits Summary Table

Plant McDonough Client: Southern Company Data: McDonough AP Printed 11/8/2021, 10:17 AM

<u>Constituent</u>	<u>Well</u>	<u>Upper Lim.</u>	<u>Date</u>	<u>Observ.</u>	<u>Sig.</u>	<u>Bg N</u>	<u>Bg Mean</u>	<u>Std. Dev.</u>	<u>%NDs</u>	<u>ND Adj.</u>	<u>Transform</u>	<u>Alpha</u>	<u>Method</u>
Antimony (mg/L)	n/a	0.003	n/a	n/a	n/a	44	n/a	n/a	79.55	n/a	n/a	0.1047	NP Inter(NDs)
Arsenic (mg/L)	n/a	0.005	n/a	n/a	n/a	44	n/a	n/a	81.82	n/a	n/a	0.1047	NP Inter(NDs)
Barium (mg/L)	n/a	0.19	n/a	n/a	n/a	44	n/a	n/a	0	n/a	n/a	0.1047	NP Inter(normality)
Beryllium (mg/L)	n/a	0.0009	n/a	n/a	n/a	45	n/a	n/a	62.22	n/a	n/a	0.09944	NP Inter(NDs)
Cadmium (mg/L)	n/a	0.0005	n/a	n/a	n/a	44	n/a	n/a	93.18	n/a	n/a	0.1047	NP Inter(NDs)
Chromium (mg/L)	n/a	0.005	n/a	n/a	n/a	43	n/a	n/a	60.47	n/a	n/a	0.1102	NP Inter(NDs)
Cobalt (mg/L)	n/a	0.0322	n/a	n/a	n/a	44	n/a	n/a	36.36	n/a	n/a	0.1047	NP Inter(normality)
Combined Radium 226 + 228 (pCi/L)	n/a	5.605	n/a	n/a	n/a	46	1.041	0.3523	0	None	x^(1/3)	0.05	Inter
Fluoride, total (mg/L)	n/a	0.42	n/a	n/a	n/a	48	n/a	n/a	52.08	n/a	n/a	0.08526	NP Inter(NDs)
Lead (mg/L)	n/a	0.001	n/a	n/a	n/a	44	n/a	n/a	79.55	n/a	n/a	0.1047	NP Inter(NDs)
Lithium (mg/L)	n/a	0.03	n/a	n/a	n/a	44	n/a	n/a	36.36	n/a	n/a	0.1047	NP Inter(normality)
Mercury (mg/L)	n/a	0.0002	n/a	n/a	n/a	44	n/a	n/a	86.36	n/a	n/a	0.1047	NP Inter(NDs)
Molybdenum (mg/L)	n/a	0.0409	n/a	n/a	n/a	44	n/a	n/a	63.64	n/a	n/a	0.1047	NP Inter(NDs)
Selenium (mg/L)	n/a	0.005	n/a	n/a	n/a	44	n/a	n/a	100	n/a	n/a	0.1047	NP Inter(NDs)
Thallium (mg/L)	n/a	0.001	n/a	n/a	n/a	44	n/a	n/a	95.45	n/a	n/a	0.1047	NP Inter(NDs)

PLANT MCDONOUGH ASH POND 1 GWPS TABLE - FEDERAL				
Constituent Name	MCL	CCR-Rule Specified	Background Limit	GWPS
Antimony, Total (mg/L)	0.006		0.003	0.006
Arsenic, Total (mg/L)	0.01		0.005	0.01
Barium, Total (mg/L)	2		0.19	2
Beryllium, Total (mg/L)	0.004		0.0009	0.004
Cadmium, Total (mg/L)	0.005		0.0005	0.005
Chromium, Total (mg/L)	0.1		0.005	0.1
Cobalt, Total (mg/L)		0.006	0.032	0.032
Combined Radium, Total (pCi/L)	5		5.61	5.61
Fluoride, Total (mg/L)	4		0.42	4
Lead, Total (mg/L)		0.015	0.001	0.015
Lithium, Total (mg/L)		0.04	0.03	0.04
Mercury, Total (mg/L)	0.002		0.0002	0.002
Molybdenum, Total (mg/L)		0.1	0.041	0.1
Selenium, Total (mg/L)	0.05		0.005	0.05
Thallium, Total (mg/L)	0.002		0.001	0.002

**Highlighted cells indicated Background is higher than MCLs or CCR-Rule*

**MCL = Maximum Contaminant Level*

**CCR = Coal Combustion Residual*

**GWPS = Groundwater Protection Standard*

PLANT MCDONOUGH ASH POND 1 GWPS TABLE - STATE				
Constituent Name	MCL	CCR-Rule Specified	Background Limit	GWPS
Antimony, Total (mg/L)	0.006		0.003	0.006
Arsenic, Total (mg/L)	0.01		0.005	0.01
Barium, Total (mg/L)	2		0.19	2
Beryllium, Total (mg/L)	0.004		0.0009	0.004
Cadmium, Total (mg/L)	0.005		0.0005	0.005
Chromium, Total (mg/L)	0.1		0.005	0.1
Cobalt, Total (mg/L)		0.006	0.032	0.032
Combined Radium, Total (pCi/L)	5		5.61	5.61
Fluoride, Total (mg/L)	4		0.42	4
Lead, Total (mg/L)		0.015	0.001	0.001
Lithium, Total (mg/L)		0.04	0.03	0.03
Mercury, Total (mg/L)	0.002		0.0002	0.002
Molybdenum, Total (mg/L)		0.1	0.041	0.041
Selenium, Total (mg/L)	0.05		0.005	0.05
Thallium, Total (mg/L)	0.002		0.001	0.002

**Highlighted cells indicated Background is higher than MCLs or CCR-Rule*

**MCL = Maximum Contaminant Level*

**CCR = Coal Combustion Residual*

**GWPS = Groundwater Protection Standard*

Federal Confidence Intervals - Significant Results

Plant McDonough Client: Southern Company Data: McDonough AP Printed 12/16/2021, 2:29 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig. N	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Arsenic (mg/L)	DGWC-69	0.0386	0.01205	0.01	Yes 17	0.03366	0.04147	0	None	In(x)	0.01	Param.
Cobalt (mg/L)	DGWC-40	0.04576	0.03776	0.032	Yes 15	0.04176	0.005898	0	None	No	0.01	Param.
Molybdenum (mg/L)	DGWC-68A	0.2226	0.1942	0.1	Yes 15	0.2089	0.02252	0	None	In(x)	0.01	Param.

Federal Confidence Intervals - All Results

Plant McDonough Client: Southern Company Data: McDonough AP Printed 12/16/2021, 2:29 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Antimony (mg/L)	B-100	0.001954	0.001046	0.006	No	4	0.00225	0.0008813	50	Kaplan-Meier	No	0.01	Param.
Antimony (mg/L)	B-62	0.003	0.00046	0.006	No	7	0.002637	0.00096	85.71	Kaplan-Meier	No	0.008	NP (NDs)
Antimony (mg/L)	DGWC-40	0.003	0.00033	0.006	No	14	0.002809	0.0007136	92.86	None	No	0.01	NP (NDs)
Antimony (mg/L)	DGWC-67	0.003	0.0023	0.006	No	14	0.002607	0.000874	78.57	None	No	0.01	NP (NDs)
Antimony (mg/L)	DGWC-68A	0.003	0.0008	0.006	No	14	0.002651	0.000891	85.71	None	No	0.01	NP (NDs)
Antimony (mg/L)	DGWC-69	0.003	0.0019	0.006	No	15	0.002693	0.0006829	80	None	No	0.01	NP (NDs)
Arsenic (mg/L)	DGWC-37	0.005	0.0019	0.01	No	15	0.004793	0.0008004	93.33	None	No	0.01	NP (NDs)
Arsenic (mg/L)	DGWC-38	0.005	0.0005	0.01	No	15	0.0047	0.001162	93.33	None	No	0.01	NP (NDs)
Arsenic (mg/L)	DGWC-39	0.005	0.0007	0.01	No	15	0.003019	0.002198	53.33	None	No	0.01	NP (NDs)
Arsenic (mg/L)	DGWC-40	0.005	0.0011	0.01	No	15	0.004157	0.001749	80	None	No	0.01	NP (NDs)
Arsenic (mg/L)	DGWC-67	0.005	0.0008	0.01	No	15	0.004415	0.001546	86.67	None	No	0.01	NP (NDs)
Arsenic (mg/L)	DGWC-68A	0.005	0.0016	0.01	No	15	0.004773	0.0008779	93.33	None	No	0.01	NP (NDs)
Arsenic (mg/L)	DGWC-69	0.0386	0.01205	0.01	Yes	17	0.03366	0.04147	0	None	ln(x)	0.01	Param.
Barium (mg/L)	B-100	0.022	0.015	2	No	4	0.02	0.003367	0	None	No	0.0625	NP (selected)
Barium (mg/L)	B-62	0.02758	0.01985	2	No	7	0.02371	0.003251	0	None	No	0.01	Param.
Barium (mg/L)	DGWC-37	0.1106	0.08922	2	No	15	0.09993	0.0158	0	None	No	0.01	Param.
Barium (mg/L)	DGWC-38	0.0336	0.032	2	No	15	0.03288	0.0009143	0	None	No	0.01	NP (normality)
Barium (mg/L)	DGWC-39	0.09601	0.08399	2	No	15	0.09	0.008868	0	None	No	0.01	Param.
Barium (mg/L)	DGWC-40	0.019	0.0168	2	No	15	0.01805	0.002624	0	None	No	0.01	NP (normality)
Barium (mg/L)	DGWC-67	0.1121	0.1001	2	No	15	0.1061	0.008863	0	None	No	0.01	Param.
Barium (mg/L)	DGWC-68A	0.09023	0.08687	2	No	15	0.08855	0.00248	0	None	No	0.01	Param.
Barium (mg/L)	DGWC-69	0.1021	0.06835	2	No	16	0.08523	0.02594	0	None	No	0.01	Param.
Beryllium (mg/L)	B-100	0.0006113	0.0002587	0.004	No	4	0.000435	0.00007767	0	None	No	0.01	Param.
Beryllium (mg/L)	B-62	0.0005	0.000078	0.004	No	8	0.0002085	0.000181	25	None	No	0.004	NP (normality)
Beryllium (mg/L)	DGWC-37	0.0005	0.000086	0.004	No	15	0.0003602	0.0002048	66.67	None	No	0.01	NP (NDs)
Beryllium (mg/L)	DGWC-38	0.0005	0.000058	0.004	No	15	0.0004705	0.0001141	93.33	None	No	0.01	NP (NDs)
Beryllium (mg/L)	DGWC-40	0.003315	0.002898	0.004	No	15	0.003107	0.0003081	6.667	None	No	0.01	Param.
Beryllium (mg/L)	DGWC-68A	0.0005	0.000084	0.004	No	15	0.000443	0.0001505	86.67	None	No	0.01	NP (NDs)
Beryllium (mg/L)	DGWC-69	0.0005	0.000061	0.004	No	16	0.0003361	0.0002186	62.5	None	No	0.01	NP (NDs)
Cadmium (mg/L)	B-100	0.00059	0.00027	0.005	No	4	0.000355	0.000157	0	None	No	0.0625	NP (normality)
Cadmium (mg/L)	DGWC-37	0.0005	0.00013	0.005	No	15	0.0003867	0.0001705	66.67	None	No	0.01	NP (NDs)
Cadmium (mg/L)	DGWC-38	0.0005	0.00017	0.005	No	15	0.00034	0.0002553	20	None	No	0.01	NP (normality)
Cadmium (mg/L)	DGWC-40	0.0008845	0.0007248	0.005	No	15	0.0008047	0.0001178	13.33	None	No	0.01	Param.
Cadmium (mg/L)	DGWC-67	0.00053	0.00018	0.005	No	15	0.000416	0.0001495	66.67	None	No	0.01	NP (NDs)
Cadmium (mg/L)	DGWC-68A	0.001	0.00017	0.005	No	15	0.000388	0.0002332	53.33	None	No	0.01	NP (NDs)
Cadmium (mg/L)	DGWC-69	0.0005	0.0002	0.005	No	16	0.0004169	0.0001502	75	None	No	0.01	NP (NDs)
Chromium (mg/L)	B-100	0.001223	0.0003828	0.1	No	4	0.002877	0.002456	50	Kaplan-Meier	sqrt(x)	0.01	Param.
Chromium (mg/L)	B-62	0.005	0.00098	0.1	No	7	0.004426	0.001519	85.71	Kaplan-Meier	No	0.008	NP (NDs)
Chromium (mg/L)	DGWC-37	0.005	0.0007	0.1	No	15	0.004419	0.001534	86.67	None	No	0.01	NP (NDs)
Chromium (mg/L)	DGWC-38	0.005	0.00092	0.1	No	15	0.004124	0.001816	80	None	No	0.01	NP (NDs)
Chromium (mg/L)	DGWC-40	0.005	0.00061	0.1	No	15	0.002267	0.002034	33.33	None	No	0.01	NP (normality)
Chromium (mg/L)	DGWC-67	0.005	0.00088	0.1	No	15	0.003899	0.001899	73.33	None	No	0.01	NP (NDs)
Chromium (mg/L)	DGWC-68A	0.005	0.0005	0.1	No	15	0.0047	0.001162	93.33	None	No	0.01	NP (NDs)
Chromium (mg/L)	DGWC-69	0.005	0.0011	0.1	No	16	0.003981	0.001829	75	None	No	0.01	NP (NDs)
Cobalt (mg/L)	B-100	0.087	0.029	0.032	No	6	0.058	0.02804	0	None	No	0.0155	NP (selected)
Cobalt (mg/L)	B-62	0.005	0.0003	0.032	No	7	0.003659	0.002291	71.43	None	No	0.008	NP (NDs)
Cobalt (mg/L)	DGWC-37	0.005	0.0005	0.032	No	15	0.004073	0.001919	80	None	No	0.01	NP (NDs)
Cobalt (mg/L)	DGWC-38	0.0017	0.0015	0.032	No	15	0.002353	0.002296	13.33	None	No	0.01	NP (normality)
Cobalt (mg/L)	DGWC-39	0.007286	0.005895	0.032	No	15	0.006633	0.001136	13.33	None	ln(x)	0.01	Param.
Cobalt (mg/L)	DGWC-40	0.04576	0.03776	0.032	Yes	15	0.04176	0.005898	0	None	No	0.01	Param.
Cobalt (mg/L)	DGWC-67	0.003862	0.001505	0.032	No	15	0.003087	0.002508	13.33	None	ln(x)	0.01	Param.
Cobalt (mg/L)	DGWC-68A	0.005	0.0015	0.032	No	15	0.004153	0.00177	80	None	No	0.01	NP (NDs)
Cobalt (mg/L)	DGWC-69	0.005	0.0016	0.032	No	16	0.003812	0.001698	62.5	None	No	0.01	NP (NDs)

Federal Confidence Intervals - All Results

Plant McDonough Client: Southern Company Data: McDonough AP Printed 12/16/2021, 2:29 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Combined Radium 226 + 228 (pCi/L)	B-100	1.4	0.168	5.61	No	4	0.7853	0.5031	0	None	No	0.0625	NP (selected)
Combined Radium 226 + 228 (pCi/L)	B-62	2.02	1.173	5.61	No	6	1.597	0.3082	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	DGWC-37	1.115	0.5395	5.61	No	15	0.8273	0.4247	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	DGWC-38	1.193	0.3928	5.61	No	15	0.7931	0.5907	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	DGWC-39	1.353	0.6709	5.61	No	15	1.012	0.5031	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	DGWC-40	1.546	0.6118	5.61	No	15	1.079	0.6893	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	DGWC-67	0.996	0.4419	5.61	No	15	0.7189	0.4089	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	DGWC-68A	1.426	0.5976	5.61	No	15	1.012	0.6109	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	DGWC-69	1.844	1.178	5.61	No	16	1.511	0.5122	0	None	No	0.01	Param.
Fluoride, total (mg/L)	B-62	0.3546	0.06003	4	No	6	0.1855	0.1295	0	None	x^(1/3)	0.01	Param.
Fluoride, total (mg/L)	DGWC-37	0.21	0.054	4	No	16	0.1014	0.07777	6.25	None	No	0.01	NP (normality)
Fluoride, total (mg/L)	DGWC-38	0.23	0.057	4	No	16	0.1214	0.1131	12.5	None	No	0.01	NP (normality)
Fluoride, total (mg/L)	DGWC-39	0.17	0.083	4	No	16	0.1576	0.1194	6.25	None	No	0.01	NP (normality)
Fluoride, total (mg/L)	DGWC-40	0.3219	0.1358	4	No	16	0.2409	0.1592	6.25	None	sqrt(x)	0.01	Param.
Fluoride, total (mg/L)	DGWC-67	0.07	0.038	4	No	16	0.08794	0.1217	50	None	No	0.01	NP (normality)
Fluoride, total (mg/L)	DGWC-68A	0.23	0.076	4	No	16	0.1544	0.1295	6.25	None	No	0.01	NP (normality)
Fluoride, total (mg/L)	DGWC-69	0.1805	0.09325	4	No	17	0.1369	0.06963	5.882	None	No	0.01	Param.
Lead (mg/L)	B-100	0.0003036	0.00005528	0.015	No	4	0.0003695	0.0004235	25	Kaplan-Meier	sqrt(x)	0.01	Param.
Lead (mg/L)	DGWC-37	0.0014	0.000061	0.015	No	15	0.0009641	0.0002702	86.67	None	No	0.01	NP (NDs)
Lead (mg/L)	DGWC-38	0.001	0.0001	0.015	No	15	0.000701	0.0004381	66.67	None	No	0.01	NP (NDs)
Lead (mg/L)	DGWC-39	0.001	0.00022	0.015	No	15	0.0008867	0.0003003	86.67	None	No	0.01	NP (NDs)
Lead (mg/L)	DGWC-40	0.001	0.00007	0.015	No	15	0.0005283	0.0004602	46.67	None	No	0.01	NP (normality)
Lead (mg/L)	DGWC-67	0.001	0.00009	0.015	No	15	0.0007629	0.0004094	73.33	None	No	0.01	NP (NDs)
Lead (mg/L)	DGWC-68A	0.001	0.00035	0.015	No	15	0.0008945	0.0002836	86.67	None	No	0.01	NP (NDs)
Lead (mg/L)	DGWC-69	0.001	0.00009	0.015	No	16	0.0006631	0.0004498	62.5	None	No	0.01	NP (NDs)
Lithium (mg/L)	B-100	0.003519	0.0007815	0.04	No	4	0.00215	0.0006028	0	None	No	0.01	Param.
Lithium (mg/L)	B-62	0.03	0.0078	0.04	No	7	0.01154	0.008158	14.29	None	No	0.008	NP (normality)
Lithium (mg/L)	DGWC-37	0.03	0.0021	0.04	No	15	0.009707	0.01267	26.67	None	No	0.01	NP (normality)
Lithium (mg/L)	DGWC-38	0.0035	0.0029	0.04	No	15	0.005	0.00692	6.667	None	No	0.01	NP (normality)
Lithium (mg/L)	DGWC-40	0.003	0.0022	0.04	No	15	0.00602	0.009739	13.33	None	No	0.01	NP (normality)
Lithium (mg/L)	DGWC-67	0.0052	0.0043	0.04	No	15	0.00634	0.006555	6.667	None	No	0.01	NP (normality)
Lithium (mg/L)	DGWC-68A	0.03	0.0016	0.04	No	15	0.02616	0.01013	86.67	None	No	0.01	NP (NDs)
Lithium (mg/L)	DGWC-69	0.0032	0.0024	0.04	No	16	0.004525	0.006804	6.25	None	No	0.01	NP (normality)
Mercury (mg/L)	DGWC-37	0.0002	0.000091	0.002	No	14	0.0001711	0.00005824	78.57	None	No	0.01	NP (NDs)
Mercury (mg/L)	DGWC-38	0.0002	0.000085	0.002	No	14	0.0001711	0.00005818	78.57	None	No	0.01	NP (NDs)
Mercury (mg/L)	DGWC-39	0.0002	0.000059	0.002	No	14	0.0001899	0.00003768	92.86	None	No	0.01	NP (NDs)
Mercury (mg/L)	DGWC-40	0.0002	0.00009	0.002	No	14	0.0001699	0.00006064	78.57	None	No	0.01	NP (NDs)
Mercury (mg/L)	DGWC-67	0.0002	0.00007	0.002	No	14	0.0001907	0.00003474	92.86	None	No	0.01	NP (NDs)
Mercury (mg/L)	DGWC-68A	0.0002	0.00007	0.002	No	14	0.0001907	0.00003474	92.86	None	No	0.01	NP (NDs)
Mercury (mg/L)	DGWC-69	0.0002	0.00007	0.002	No	15	0.0001913	0.00003357	93.33	None	No	0.01	NP (NDs)
Molybdenum (mg/L)	DGWC-38	0.01	0.00099	0.1	No	15	0.005219	0.004629	46.67	None	No	0.01	NP (normality)
Molybdenum (mg/L)	DGWC-68A	0.2226	0.1942	0.1	Yes	15	0.2089	0.02252	0	None	ln(x)	0.01	Param.
Molybdenum (mg/L)	DGWC-69	0.01236	0.006699	0.1	No	16	0.01023	0.005862	6.25	None	ln(x)	0.01	Param.
Selenium (mg/L)	B-100	0.005	0.0019	0.05	No	4	0.004225	0.00155	75	Kaplan-Meier	No	0.0625	NP (NDs)
Selenium (mg/L)	DGWC-38	0.005	0.0019	0.05	No	15	0.004793	0.0008004	93.33	None	No	0.01	NP (NDs)
Selenium (mg/L)	DGWC-40	0.003517	0.001857	0.05	No	15	0.003607	0.002356	20	Kaplan-Meier	x^(1/3)	0.01	Param.
Selenium (mg/L)	DGWC-67	0.005	0.0027	0.05	No	15	0.004847	0.0005939	93.33	Kaplan-Meier	No	0.01	NP (NDs)
Selenium (mg/L)	DGWC-68A	0.005	0.0017	0.05	No	15	0.00478	0.0008521	93.33	Kaplan-Meier	No	0.01	NP (NDs)
Thallium (mg/L)	DGWC-38	0.001	0.0001	0.002	No	15	0.000534	0.0004517	46.67	None	No	0.01	NP (normality)
Thallium (mg/L)	DGWC-39	0.001	0.00009	0.002	No	15	0.0006953	0.0004461	66.67	None	No	0.01	NP (NDs)
Thallium (mg/L)	DGWC-40	0.001	0.000068	0.002	No	15	0.0006885	0.0004559	66.67	None	No	0.01	NP (NDs)
Thallium (mg/L)	DGWC-68A	0.001	0.00015	0.002	No	15	0.0009433	0.0002195	93.33	None	No	0.01	NP (NDs)

State Confidence Intervals - Significant Results

Plant McDonough Client: Southern Company Data: McDonough AP Printed 12/16/2021, 2:32 PM

<u>Constituent</u>	<u>Well</u>	<u>Upper Lim.</u>	<u>Lower Lim.</u>	<u>Compliance</u>	<u>Sig. N</u>	<u>Mean</u>	<u>Std. Dev.</u>	<u>%NDs</u>	<u>ND Adj.</u>	<u>Transform</u>	<u>Alpha</u>	<u>Method</u>
Arsenic (mg/L)	DGWC-69	0.0386	0.01205	0.01	Yes 17	0.03366	0.04147	0	None	In(x)	0.01	Param.
Cobalt (mg/L)	DGWC-40	0.04576	0.03776	0.032	Yes 15	0.04176	0.005898	0	None	No	0.01	Param.
Molybdenum (mg/L)	DGWC-68A	0.2226	0.1942	0.041	Yes 15	0.2089	0.02252	0	None	In(x)	0.01	Param.

State Confidence Intervals - All Results

Plant McDonough Client: Southern Company Data: McDonough AP Printed 12/16/2021, 2:32 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Antimony (mg/L)	B-100	0.001954	0.001046	0.006	No	4	0.00225	0.0008813	50	Kaplan-Meier	No	0.01	Param.
Antimony (mg/L)	B-62	0.003	0.00046	0.006	No	7	0.002637	0.00096	85.71	Kaplan-Meier	No	0.008	NP (NDs)
Antimony (mg/L)	DGWC-40	0.003	0.00033	0.006	No	14	0.002809	0.0007136	92.86	None	No	0.01	NP (NDs)
Antimony (mg/L)	DGWC-67	0.003	0.0023	0.006	No	14	0.002607	0.000874	78.57	None	No	0.01	NP (NDs)
Antimony (mg/L)	DGWC-68A	0.003	0.0008	0.006	No	14	0.002651	0.000891	85.71	None	No	0.01	NP (NDs)
Antimony (mg/L)	DGWC-69	0.003	0.0019	0.006	No	15	0.002693	0.0006829	80	None	No	0.01	NP (NDs)
Arsenic (mg/L)	DGWC-37	0.005	0.0019	0.01	No	15	0.004793	0.0008004	93.33	None	No	0.01	NP (NDs)
Arsenic (mg/L)	DGWC-38	0.005	0.0005	0.01	No	15	0.0047	0.001162	93.33	None	No	0.01	NP (NDs)
Arsenic (mg/L)	DGWC-39	0.005	0.0007	0.01	No	15	0.003019	0.002198	53.33	None	No	0.01	NP (NDs)
Arsenic (mg/L)	DGWC-40	0.005	0.0011	0.01	No	15	0.004157	0.001749	80	None	No	0.01	NP (NDs)
Arsenic (mg/L)	DGWC-67	0.005	0.0008	0.01	No	15	0.004415	0.001546	86.67	None	No	0.01	NP (NDs)
Arsenic (mg/L)	DGWC-68A	0.005	0.0016	0.01	No	15	0.004773	0.0008779	93.33	None	No	0.01	NP (NDs)
Arsenic (mg/L)	DGWC-69	0.0386	0.01205	0.01	Yes	17	0.03366	0.04147	0	None	ln(x)	0.01	Param.
Barium (mg/L)	B-100	0.022	0.015	2	No	4	0.02	0.003367	0	None	No	0.0625	NP (selected)
Barium (mg/L)	B-62	0.02758	0.01985	2	No	7	0.02371	0.003251	0	None	No	0.01	Param.
Barium (mg/L)	DGWC-37	0.1106	0.08922	2	No	15	0.09993	0.0158	0	None	No	0.01	Param.
Barium (mg/L)	DGWC-38	0.0336	0.032	2	No	15	0.03288	0.0009143	0	None	No	0.01	NP (normality)
Barium (mg/L)	DGWC-39	0.09601	0.08399	2	No	15	0.09	0.008868	0	None	No	0.01	Param.
Barium (mg/L)	DGWC-40	0.019	0.0168	2	No	15	0.01805	0.002624	0	None	No	0.01	NP (normality)
Barium (mg/L)	DGWC-67	0.1121	0.1001	2	No	15	0.1061	0.008863	0	None	No	0.01	Param.
Barium (mg/L)	DGWC-68A	0.09023	0.08687	2	No	15	0.08855	0.00248	0	None	No	0.01	Param.
Barium (mg/L)	DGWC-69	0.1021	0.06835	2	No	16	0.08523	0.02594	0	None	No	0.01	Param.
Beryllium (mg/L)	B-100	0.0006113	0.0002587	0.004	No	4	0.000435	0.00007767	0	None	No	0.01	Param.
Beryllium (mg/L)	B-62	0.0005	0.000078	0.004	No	8	0.0002085	0.000181	25	None	No	0.004	NP (normality)
Beryllium (mg/L)	DGWC-37	0.0005	0.000086	0.004	No	15	0.0003602	0.0002048	66.67	None	No	0.01	NP (NDs)
Beryllium (mg/L)	DGWC-38	0.0005	0.000058	0.004	No	15	0.0004705	0.0001141	93.33	None	No	0.01	NP (NDs)
Beryllium (mg/L)	DGWC-40	0.003315	0.002898	0.004	No	15	0.003107	0.0003081	6.667	None	No	0.01	Param.
Beryllium (mg/L)	DGWC-68A	0.0005	0.000084	0.004	No	15	0.000443	0.0001505	86.67	None	No	0.01	NP (NDs)
Beryllium (mg/L)	DGWC-69	0.0005	0.000061	0.004	No	16	0.0003361	0.0002186	62.5	None	No	0.01	NP (NDs)
Cadmium (mg/L)	B-100	0.00059	0.00027	0.005	No	4	0.000355	0.000157	0	None	No	0.0625	NP (normality)
Cadmium (mg/L)	DGWC-37	0.0005	0.00013	0.005	No	15	0.0003867	0.0001705	66.67	None	No	0.01	NP (NDs)
Cadmium (mg/L)	DGWC-38	0.0005	0.00017	0.005	No	15	0.00034	0.0002553	20	None	No	0.01	NP (normality)
Cadmium (mg/L)	DGWC-40	0.0008845	0.0007248	0.005	No	15	0.0008047	0.0001178	13.33	None	No	0.01	Param.
Cadmium (mg/L)	DGWC-67	0.00053	0.00018	0.005	No	15	0.000416	0.0001495	66.67	None	No	0.01	NP (NDs)
Cadmium (mg/L)	DGWC-68A	0.001	0.00017	0.005	No	15	0.000388	0.0002332	53.33	None	No	0.01	NP (NDs)
Cadmium (mg/L)	DGWC-69	0.0005	0.0002	0.005	No	16	0.0004169	0.0001502	75	None	No	0.01	NP (NDs)
Chromium (mg/L)	B-100	0.001223	0.0003828	0.1	No	4	0.002877	0.002456	50	Kaplan-Meier	sqrt(x)	0.01	Param.
Chromium (mg/L)	B-62	0.005	0.00098	0.1	No	7	0.004426	0.001519	85.71	Kaplan-Meier	No	0.008	NP (NDs)
Chromium (mg/L)	DGWC-37	0.005	0.0007	0.1	No	15	0.004419	0.001534	86.67	None	No	0.01	NP (NDs)
Chromium (mg/L)	DGWC-38	0.005	0.00092	0.1	No	15	0.004124	0.001816	80	None	No	0.01	NP (NDs)
Chromium (mg/L)	DGWC-40	0.005	0.00061	0.1	No	15	0.002267	0.002034	33.33	None	No	0.01	NP (normality)
Chromium (mg/L)	DGWC-67	0.005	0.00088	0.1	No	15	0.003899	0.001899	73.33	None	No	0.01	NP (NDs)
Chromium (mg/L)	DGWC-68A	0.005	0.0005	0.1	No	15	0.0047	0.001162	93.33	None	No	0.01	NP (NDs)
Chromium (mg/L)	DGWC-69	0.005	0.0011	0.1	No	16	0.003981	0.001829	75	None	No	0.01	NP (NDs)
Cobalt (mg/L)	B-100	0.087	0.029	0.032	No	6	0.058	0.02804	0	None	No	0.0155	NP (selected)
Cobalt (mg/L)	B-62	0.005	0.0003	0.032	No	7	0.003659	0.002291	71.43	None	No	0.008	NP (NDs)
Cobalt (mg/L)	DGWC-37	0.005	0.0005	0.032	No	15	0.004073	0.001919	80	None	No	0.01	NP (NDs)
Cobalt (mg/L)	DGWC-38	0.0017	0.0015	0.032	No	15	0.002353	0.002296	13.33	None	No	0.01	NP (normality)
Cobalt (mg/L)	DGWC-39	0.007286	0.005895	0.032	No	15	0.006633	0.001136	13.33	None	ln(x)	0.01	Param.
Cobalt (mg/L)	DGWC-40	0.04576	0.03776	0.032	Yes	15	0.04176	0.005898	0	None	No	0.01	Param.
Cobalt (mg/L)	DGWC-67	0.003862	0.001505	0.032	No	15	0.003087	0.002508	13.33	None	ln(x)	0.01	Param.
Cobalt (mg/L)	DGWC-68A	0.005	0.0015	0.032	No	15	0.004153	0.00177	80	None	No	0.01	NP (NDs)
Cobalt (mg/L)	DGWC-69	0.005	0.0016	0.032	No	16	0.003812	0.001698	62.5	None	No	0.01	NP (NDs)

State Confidence Intervals - All Results

Plant McDonough Client: Southern Company Data: McDonough AP Printed 12/16/2021, 2:32 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Combined Radium 226 + 228 (pCi/L)	B-100	1.4	0.168	5.61	No	4	0.7853	0.5031	0	None	No	0.0625	NP (selected)
Combined Radium 226 + 228 (pCi/L)	B-62	2.02	1.173	5.61	No	6	1.597	0.3082	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	DGWC-37	1.115	0.5395	5.61	No	15	0.8273	0.4247	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	DGWC-38	1.193	0.3928	5.61	No	15	0.7931	0.5907	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	DGWC-39	1.353	0.6709	5.61	No	15	1.012	0.5031	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	DGWC-40	1.546	0.6118	5.61	No	15	1.079	0.6893	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	DGWC-67	0.996	0.4419	5.61	No	15	0.7189	0.4089	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	DGWC-68A	1.426	0.5976	5.61	No	15	1.012	0.6109	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	DGWC-69	1.844	1.178	5.61	No	16	1.511	0.5122	0	None	No	0.01	Param.
Fluoride, total (mg/L)	B-62	0.3546	0.06003	4	No	6	0.1855	0.1295	0	None	x^(1/3)	0.01	Param.
Fluoride, total (mg/L)	DGWC-37	0.21	0.054	4	No	16	0.1014	0.07777	6.25	None	No	0.01	NP (normality)
Fluoride, total (mg/L)	DGWC-38	0.23	0.057	4	No	16	0.1214	0.1131	12.5	None	No	0.01	NP (normality)
Fluoride, total (mg/L)	DGWC-39	0.17	0.083	4	No	16	0.1576	0.1194	6.25	None	No	0.01	NP (normality)
Fluoride, total (mg/L)	DGWC-40	0.3219	0.1358	4	No	16	0.2409	0.1592	6.25	None	sqrt(x)	0.01	Param.
Fluoride, total (mg/L)	DGWC-67	0.07	0.038	4	No	16	0.08794	0.1217	50	None	No	0.01	NP (normality)
Fluoride, total (mg/L)	DGWC-68A	0.23	0.076	4	No	16	0.1544	0.1295	6.25	None	No	0.01	NP (normality)
Fluoride, total (mg/L)	DGWC-69	0.1805	0.09325	4	No	17	0.1369	0.06963	5.882	None	No	0.01	Param.
Lead (mg/L)	B-100	0.0003036	0.00005528	0.001	No	4	0.0003695	0.0004235	25	Kaplan-Meier	sqrt(x)	0.01	Param.
Lead (mg/L)	DGWC-37	0.0014	0.000061	0.001	No	15	0.0009641	0.0002702	86.67	None	No	0.01	NP (NDs)
Lead (mg/L)	DGWC-38	0.001	0.0001	0.001	No	15	0.000701	0.0004381	66.67	None	No	0.01	NP (NDs)
Lead (mg/L)	DGWC-39	0.001	0.00022	0.001	No	15	0.0008867	0.0003003	86.67	None	No	0.01	NP (NDs)
Lead (mg/L)	DGWC-40	0.001	0.00007	0.001	No	15	0.0005283	0.0004602	46.67	None	No	0.01	NP (normality)
Lead (mg/L)	DGWC-67	0.001	0.00009	0.001	No	15	0.0007629	0.0004094	73.33	None	No	0.01	NP (NDs)
Lead (mg/L)	DGWC-68A	0.001	0.00035	0.001	No	15	0.0008945	0.0002836	86.67	None	No	0.01	NP (NDs)
Lead (mg/L)	DGWC-69	0.001	0.00009	0.001	No	16	0.0006631	0.0004498	62.5	None	No	0.01	NP (NDs)
Lithium (mg/L)	B-100	0.003519	0.0007815	0.03	No	4	0.00215	0.0006028	0	None	No	0.01	Param.
Lithium (mg/L)	B-62	0.03	0.0078	0.03	No	7	0.01154	0.008158	14.29	None	No	0.008	NP (normality)
Lithium (mg/L)	DGWC-37	0.03	0.0021	0.03	No	15	0.009707	0.01267	26.67	None	No	0.01	NP (normality)
Lithium (mg/L)	DGWC-38	0.0035	0.0029	0.03	No	15	0.005	0.00692	6.667	None	No	0.01	NP (normality)
Lithium (mg/L)	DGWC-40	0.003	0.0022	0.03	No	15	0.00602	0.009739	13.33	None	No	0.01	NP (normality)
Lithium (mg/L)	DGWC-67	0.0052	0.0043	0.03	No	15	0.00634	0.006555	6.667	None	No	0.01	NP (normality)
Lithium (mg/L)	DGWC-68A	0.03	0.0016	0.03	No	15	0.02616	0.01013	86.67	None	No	0.01	NP (NDs)
Lithium (mg/L)	DGWC-69	0.0032	0.0024	0.03	No	16	0.004525	0.006804	6.25	None	No	0.01	NP (normality)
Mercury (mg/L)	DGWC-37	0.0002	0.000091	0.002	No	14	0.0001711	0.00005824	78.57	None	No	0.01	NP (NDs)
Mercury (mg/L)	DGWC-38	0.0002	0.000085	0.002	No	14	0.0001711	0.00005818	78.57	None	No	0.01	NP (NDs)
Mercury (mg/L)	DGWC-39	0.0002	0.000059	0.002	No	14	0.0001899	0.00003768	92.86	None	No	0.01	NP (NDs)
Mercury (mg/L)	DGWC-40	0.0002	0.00009	0.002	No	14	0.0001699	0.00006064	78.57	None	No	0.01	NP (NDs)
Mercury (mg/L)	DGWC-67	0.0002	0.00007	0.002	No	14	0.0001907	0.00003474	92.86	None	No	0.01	NP (NDs)
Mercury (mg/L)	DGWC-68A	0.0002	0.00007	0.002	No	14	0.0001907	0.00003474	92.86	None	No	0.01	NP (NDs)
Mercury (mg/L)	DGWC-69	0.0002	0.00007	0.002	No	15	0.0001913	0.00003357	93.33	None	No	0.01	NP (NDs)
Molybdenum (mg/L)	DGWC-38	0.01	0.00099	0.041	No	15	0.005219	0.004629	46.67	None	No	0.01	NP (normality)
Molybdenum (mg/L)	DGWC-68A	0.2226	0.1942	0.041	Yes	15	0.2089	0.02252	0	None	ln(x)	0.01	Param.
Molybdenum (mg/L)	DGWC-69	0.01236	0.006699	0.041	No	16	0.01023	0.005862	6.25	None	ln(x)	0.01	Param.
Selenium (mg/L)	B-100	0.005	0.0019	0.05	No	4	0.004225	0.00155	75	Kaplan-Meier	No	0.0625	NP (NDs)
Selenium (mg/L)	DGWC-38	0.005	0.0019	0.05	No	15	0.004793	0.0008004	93.33	None	No	0.01	NP (NDs)
Selenium (mg/L)	DGWC-40	0.003517	0.001857	0.05	No	15	0.003607	0.002356	20	Kaplan-Meier	x^(1/3)	0.01	Param.
Selenium (mg/L)	DGWC-67	0.005	0.0027	0.05	No	15	0.004847	0.0005939	93.33	Kaplan-Meier	No	0.01	NP (NDs)
Selenium (mg/L)	DGWC-68A	0.005	0.0017	0.05	No	15	0.00478	0.0008521	93.33	Kaplan-Meier	No	0.01	NP (NDs)
Thallium (mg/L)	DGWC-38	0.001	0.0001	0.002	No	15	0.000534	0.0004517	46.67	None	No	0.01	NP (normality)
Thallium (mg/L)	DGWC-39	0.001	0.00009	0.002	No	15	0.0006953	0.0004461	66.67	None	No	0.01	NP (NDs)
Thallium (mg/L)	DGWC-40	0.001	0.000068	0.002	No	15	0.0006885	0.0004559	66.67	None	No	0.01	NP (NDs)
Thallium (mg/L)	DGWC-68A	0.001	0.00015	0.002	No	15	0.0009433	0.0002195	93.33	None	No	0.01	NP (NDs)

Appendix IV Trend Tests - Significant Results

Plant McDonough Client: Southern Company Data: McDonough AP Printed 11/8/2021, 11:00 AM

<u>Constituent</u>	<u>Well</u>	<u>Slope</u>	<u>Calc.</u>	<u>Critical</u>	<u>Sig.</u>	<u>N</u>	<u>%NDs</u>	<u>Normality</u>	<u>Xform</u>	<u>Alpha</u>	<u>Method</u>
Cobalt (mg/L)	DGWA-53 (bg)	-0.005485	-77	-53	Yes	15	0	n/a	n/a	0.01	NP
Cobalt (mg/L)	DGWC-40	0.002343	56	53	Yes	15	0	n/a	n/a	0.01	NP

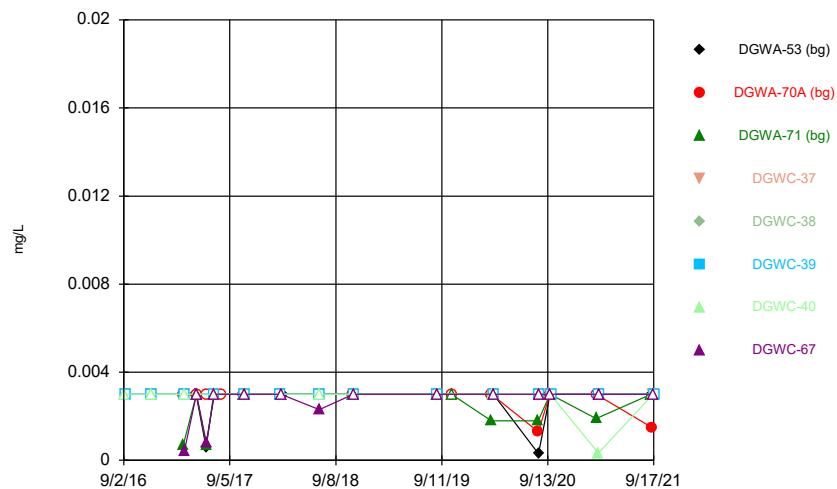
Appendix IV Trend Tests - All Results

Plant McDonough Client: Southern Company Data: McDonough AP Printed 11/8/2021, 11:00 AM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Arsenic (mg/L)	DGWA-53 (bg)	0	11	53	No	15	66.67	n/a	n/a	0.01	NP
Arsenic (mg/L)	DGWA-70A (bg)	0	-4	-53	No	15	93.33	n/a	n/a	0.01	NP
Arsenic (mg/L)	DGWA-71 (bg)	0	9	48	No	14	85.71	n/a	n/a	0.01	NP
Arsenic (mg/L)	DGWC-69	0.00508	52	63	No	17	0	n/a	n/a	0.01	NP
Cobalt (mg/L)	DGWA-53 (bg)	-0.005485	-77	-53	Yes	15	0	n/a	n/a	0.01	NP
Cobalt (mg/L)	DGWA-70A (bg)	0	13	53	No	15	46.67	n/a	n/a	0.01	NP
Cobalt (mg/L)	DGWA-71 (bg)	0	35	48	No	14	64.29	n/a	n/a	0.01	NP
Cobalt (mg/L)	DGWC-40	0.002343	56	53	Yes	15	0	n/a	n/a	0.01	NP
Molybdenum (mg/L)	DGWA-53 (bg)	-0.002607	-25	-53	No	15	0	n/a	n/a	0.01	NP
Molybdenum (mg/L)	DGWA-70A (bg)	0	0	53	No	15	100	n/a	n/a	0.01	NP
Molybdenum (mg/L)	DGWA-71 (bg)	0	13	48	No	14	92.86	n/a	n/a	0.01	NP
Molybdenum (mg/L)	DGWC-68A	-0.006801	-42	-53	No	15	0	n/a	n/a	0.01	NP

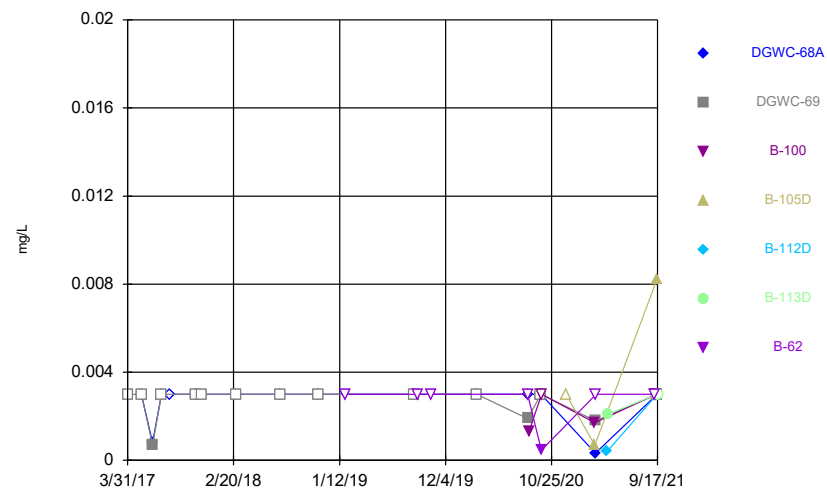
FIGURE A.

Time Series



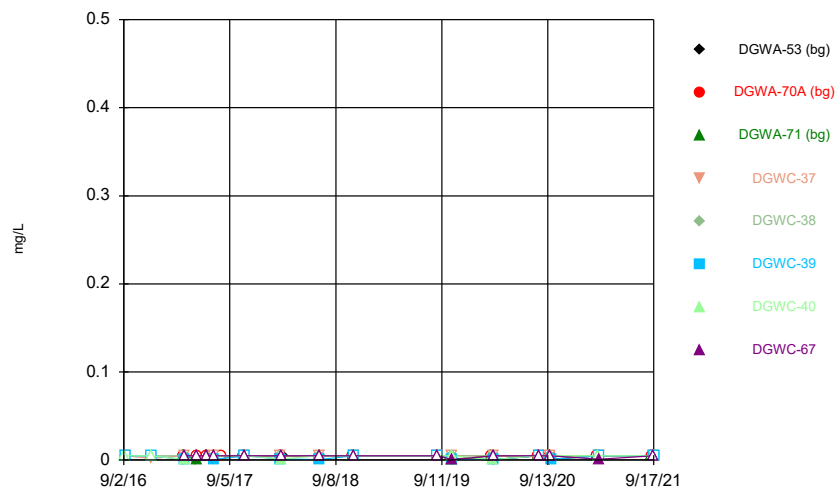
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Plant McDonough Client: Southern Company Data: McDonough AP

Time Series



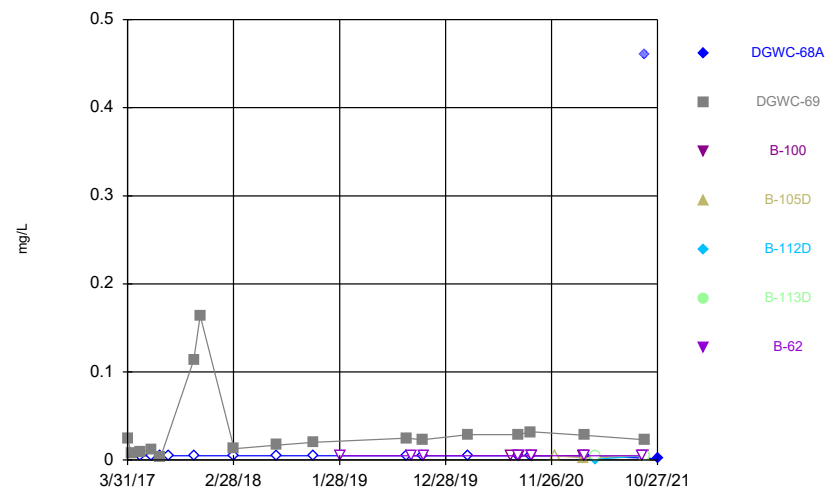
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Time Series



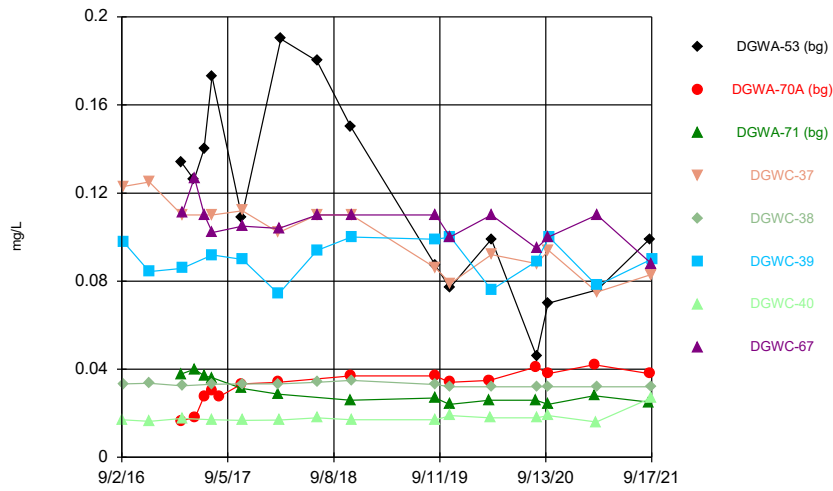
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Time Series



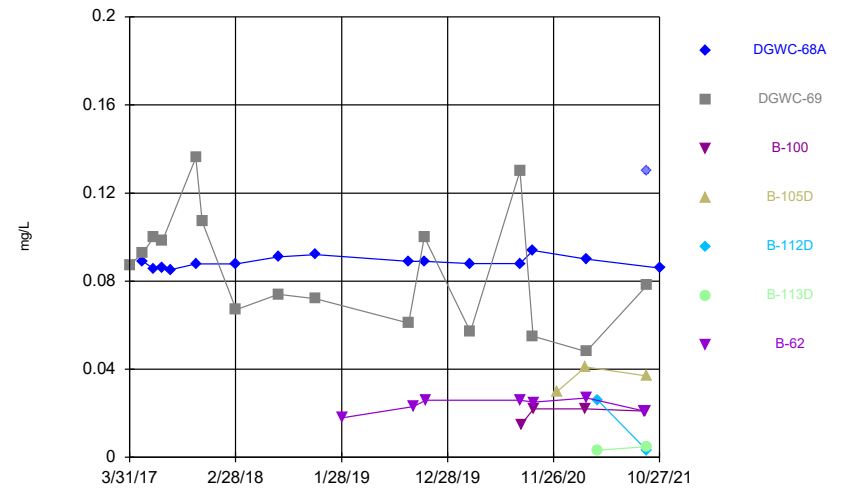
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Time Series



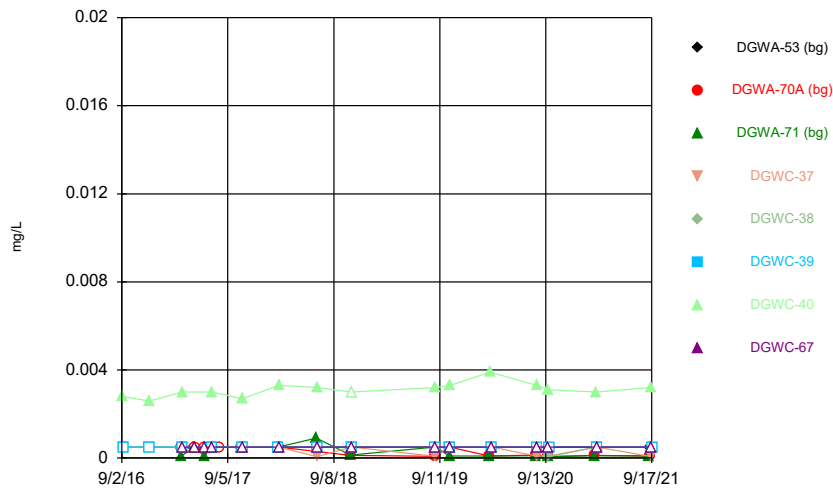
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 Plant McDonough Client: Southern Company Data: McDonough AP

Time Series



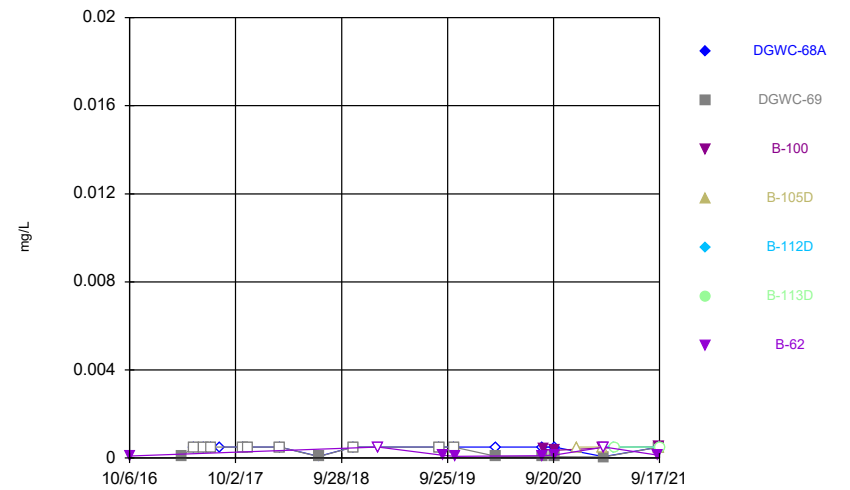
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 Plant McDonough Client: Southern Company Data: McDonough AP

Time Series



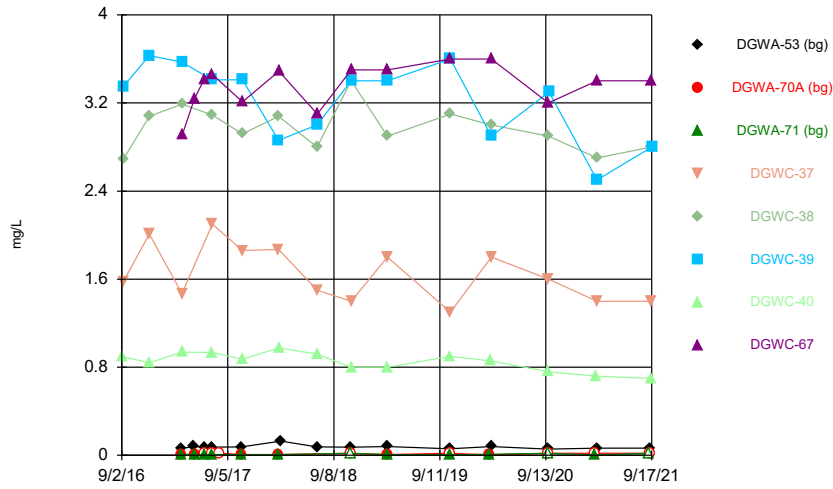
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 Plant McDonough Client: Southern Company Data: McDonough AP

Time Series



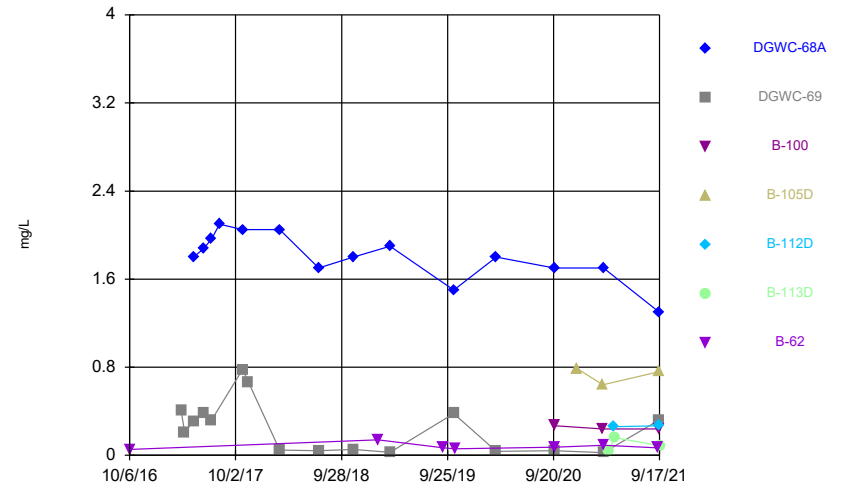
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 Plant McDonough Client: Southern Company Data: McDonough AP

Time Series



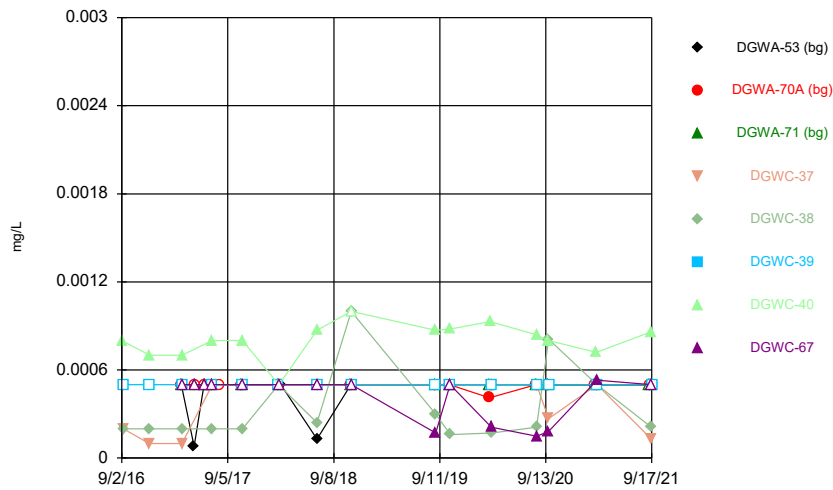
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Plant McDonough Client: Southern Company Data: McDonough AP

Time Series



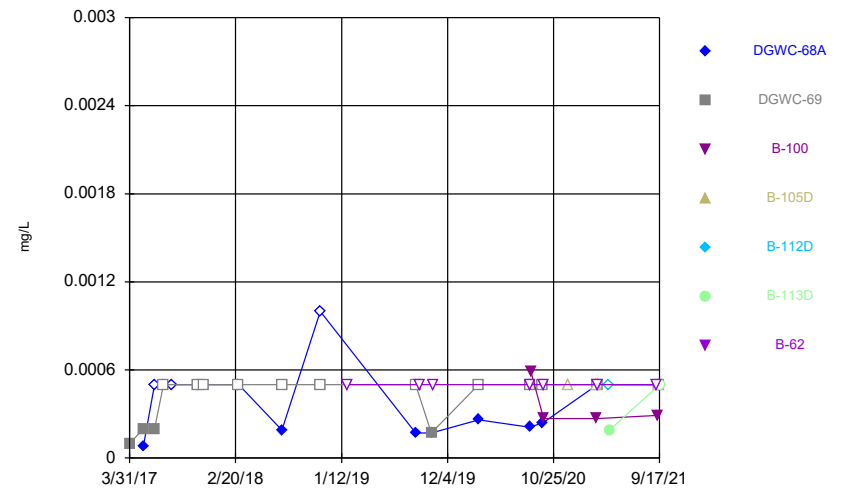
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Plant McDonough Client: Southern Company Data: McDonough AP

Time Series



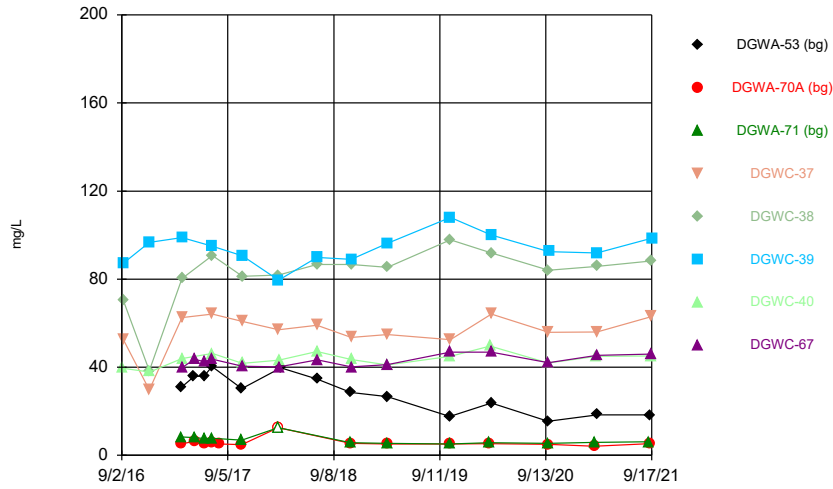
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Plant McDonough Client: Southern Company Data: McDonough AP

Time Series



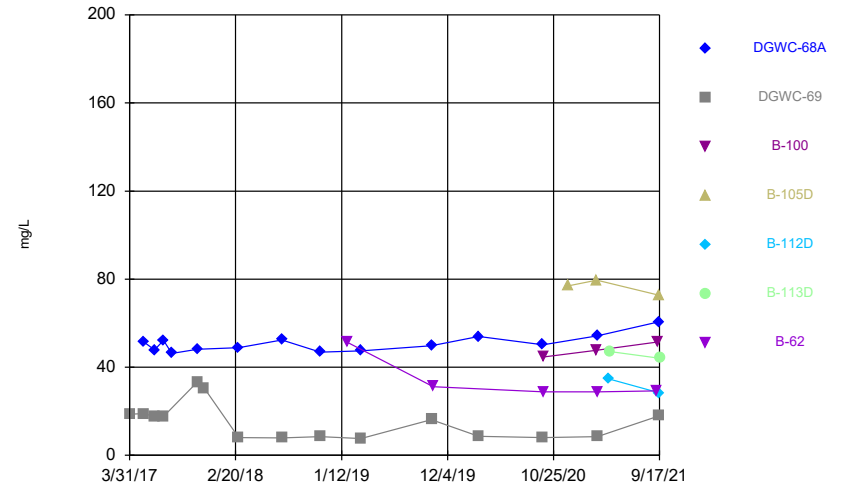
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Plant McDonough Client: Southern Company Data: McDonough AP

Time Series



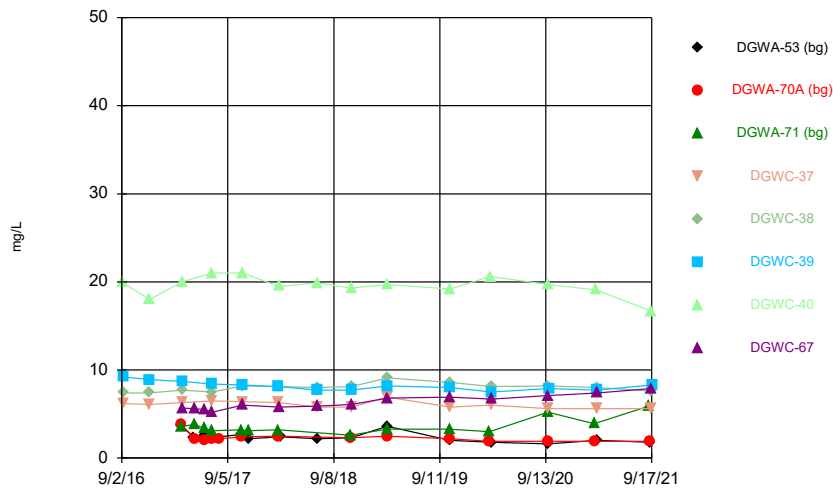
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 Plant McDonough Client: Southern Company Data: McDonough AP

Time Series



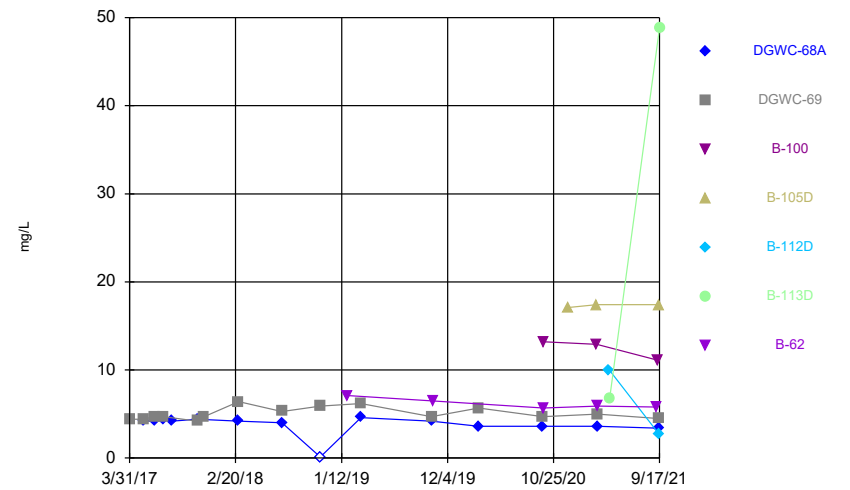
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 Plant McDonough Client: Southern Company Data: McDonough AP

Time Series



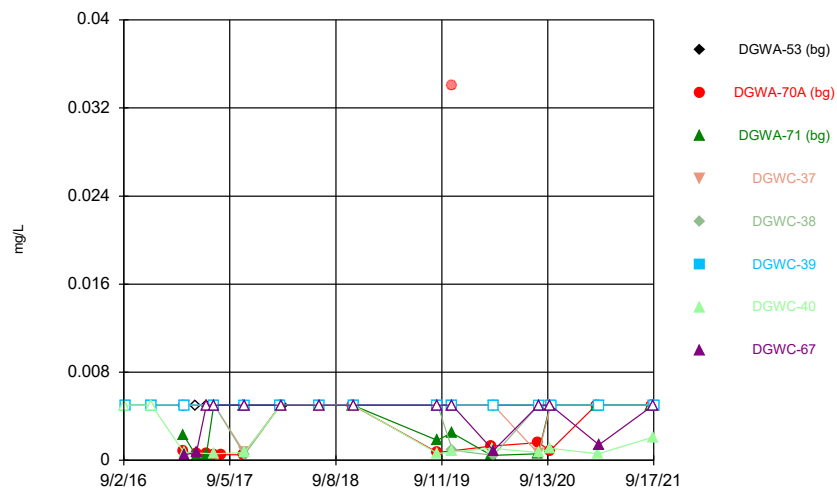
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 Plant McDonough Client: Southern Company Data: McDonough AP

Time Series



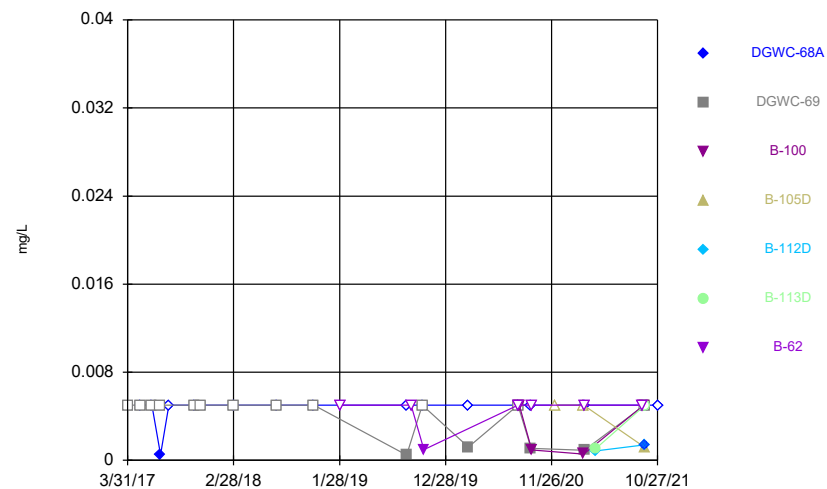
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Time Series



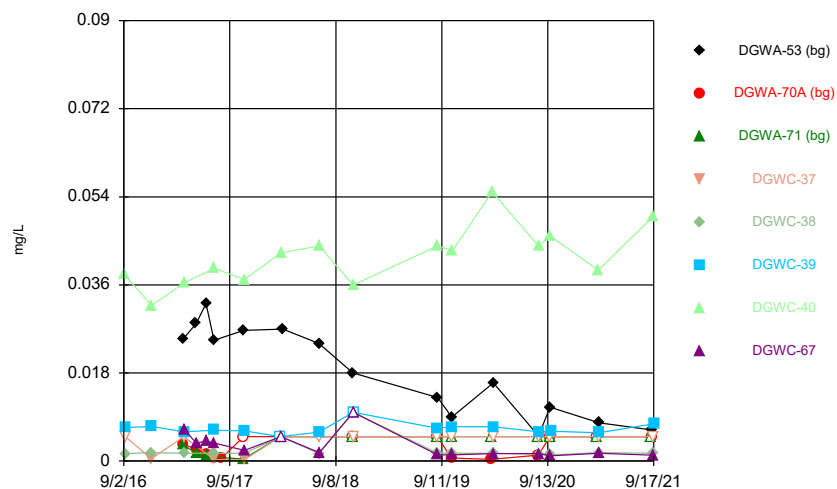
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Time Series



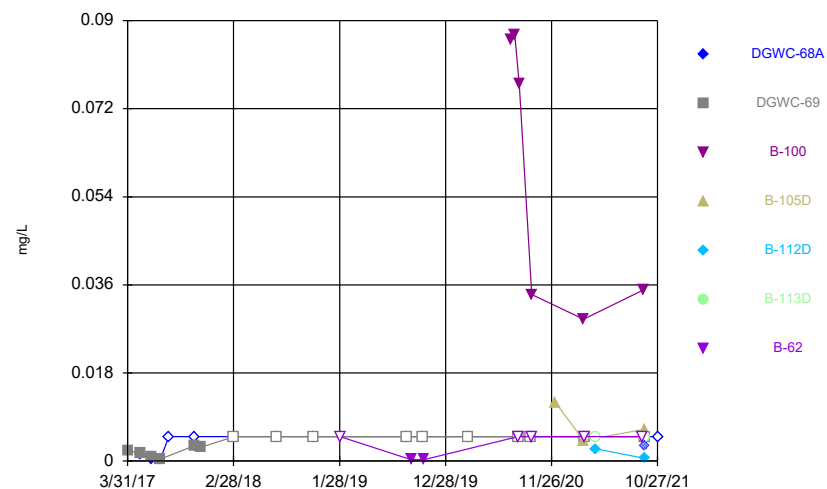
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Time Series



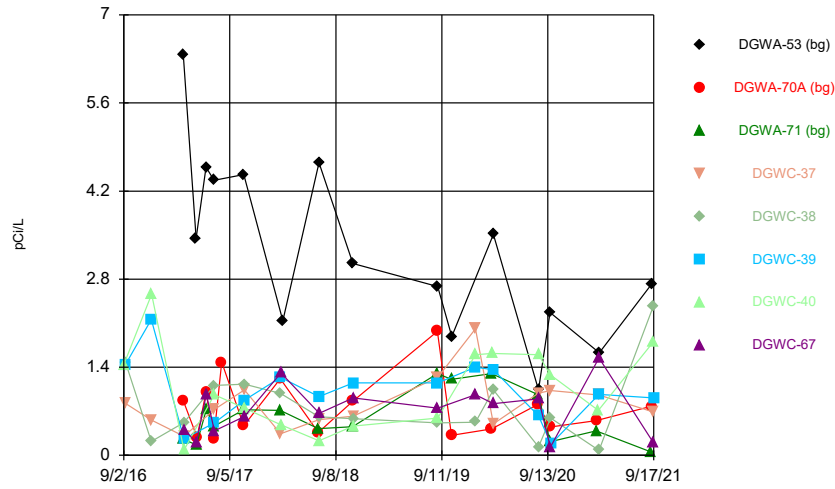
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Time Series



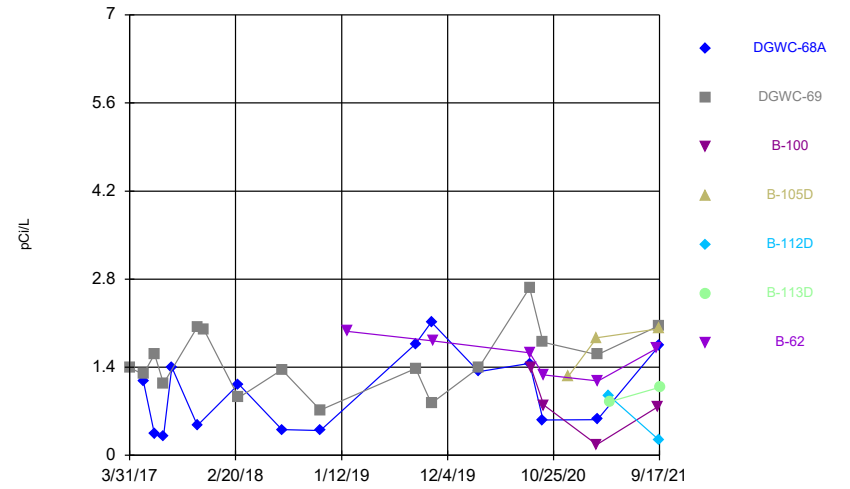
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Plant McDonough Client: Southern Company Data: McDonough AP

Time Series



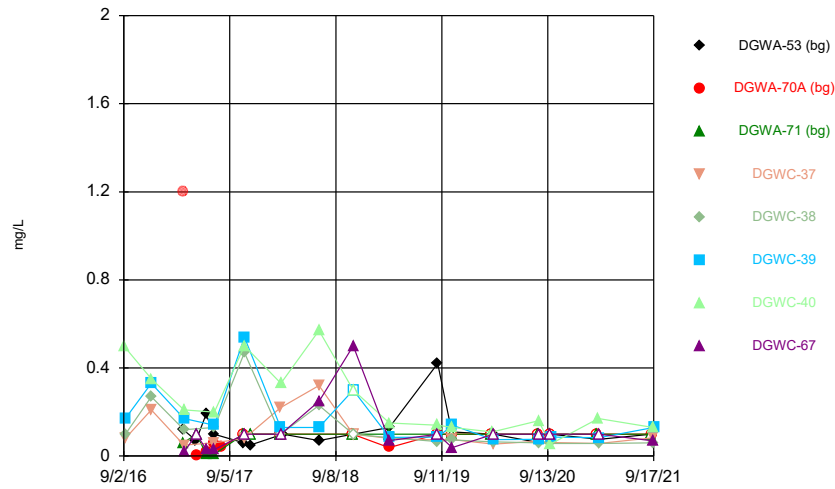
Constituent: Combined Radium 226 + 228 Analysis Run 12/16/2021 2:07 PM View: AP 1
 Plant McDonough Client: Southern Company Data: McDonough AP

Time Series



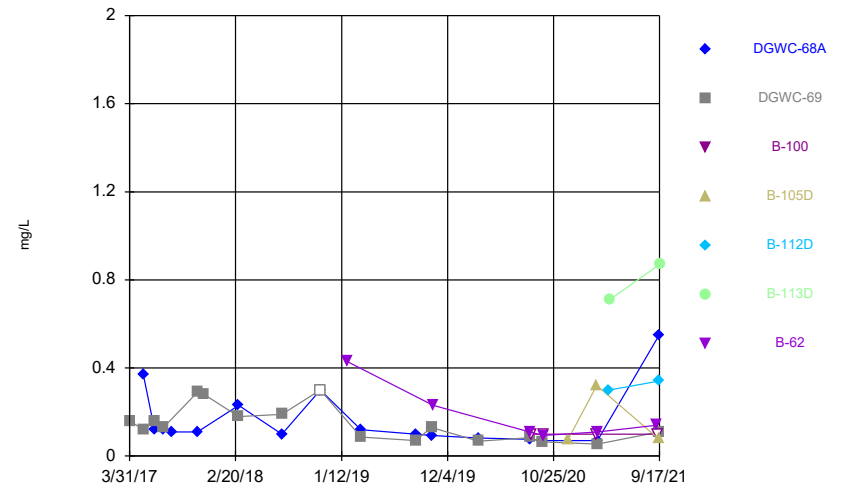
Constituent: Combined Radium 226 + 228 Analysis Run 12/16/2021 2:07 PM View: AP 1
 Plant McDonough Client: Southern Company Data: McDonough AP

Time Series



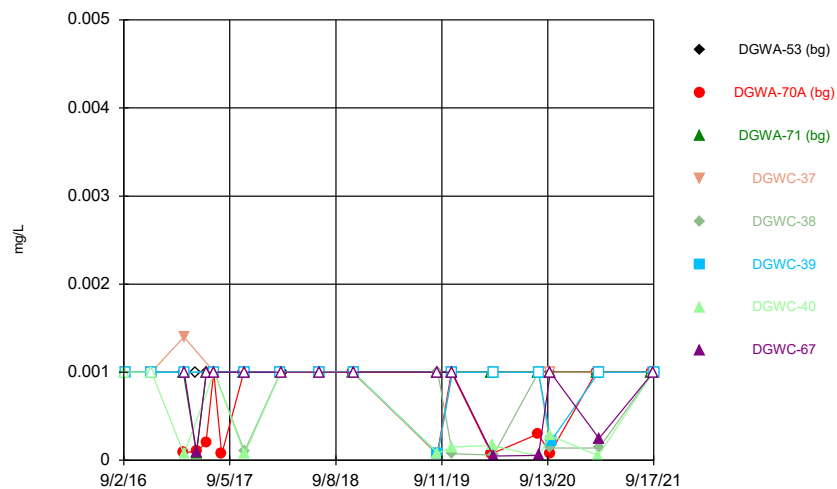
Constituent: Fluoride, total Analysis Run 12/16/2021 2:07 PM View: AP 1
 Plant McDonough Client: Southern Company Data: McDonough AP

Time Series



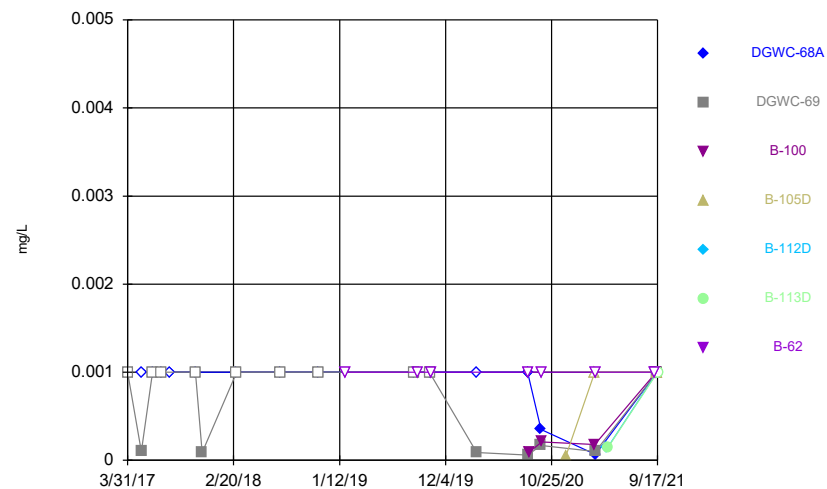
Constituent: Fluoride, total Analysis Run 12/16/2021 2:07 PM View: AP 1
 Plant McDonough Client: Southern Company Data: McDonough AP

Time Series



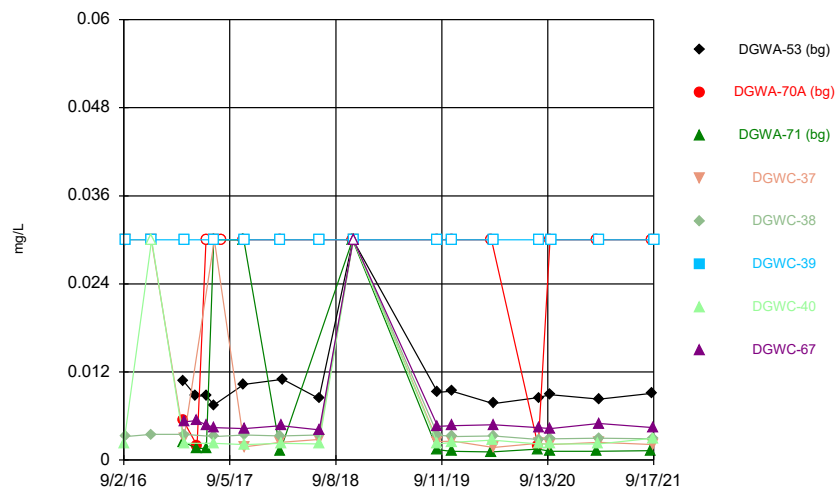
Constituent: Lead Analysis Run 12/16/2021 2:07 PM View: AP 1
Plant McDonough Client: Southern Company Data: McDonough AP

Time Series



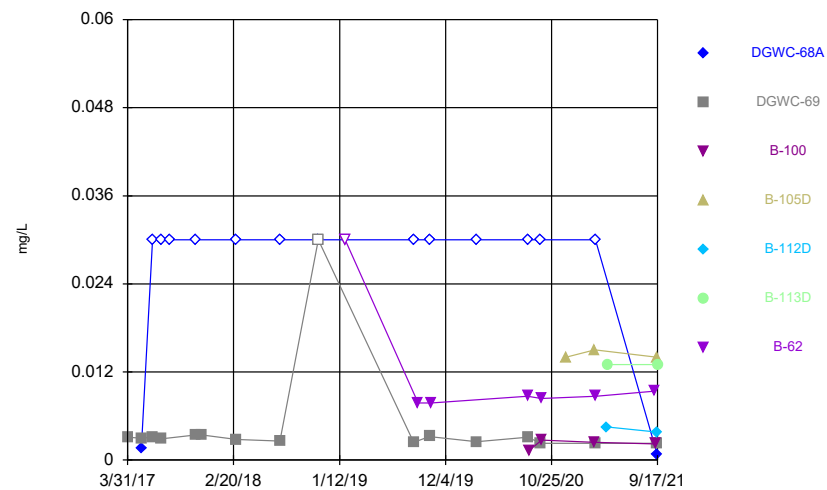
Constituent: Lead Analysis Run 12/16/2021 2:07 PM View: AP 1
Plant McDonough Client: Southern Company Data: McDonough AP

Time Series



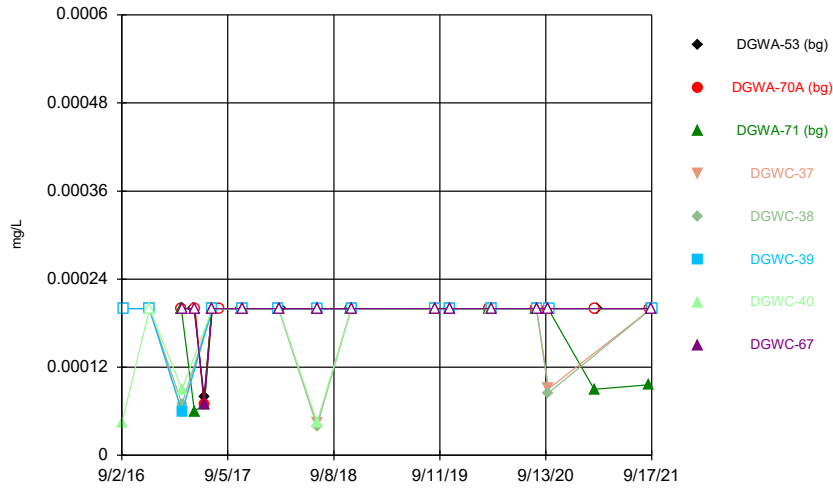
Constituent: Lithium Analysis Run 12/16/2021 2:07 PM View: AP 1
Plant McDonough Client: Southern Company Data: McDonough AP

Time Series



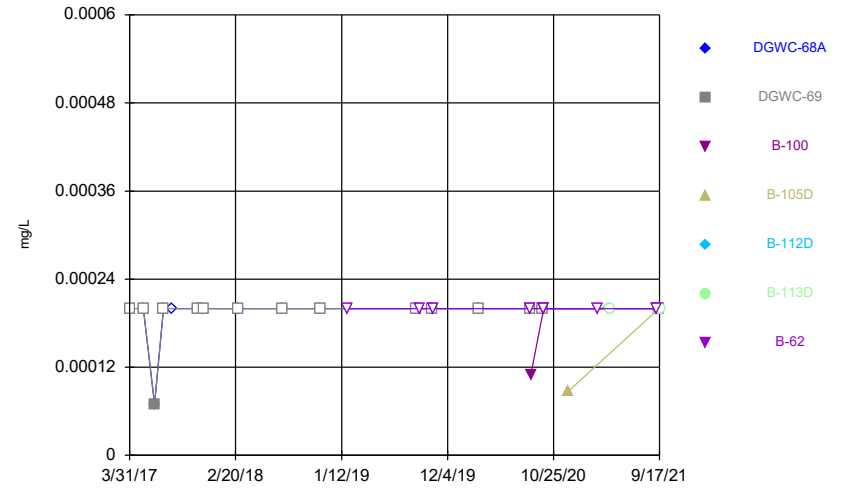
Constituent: Lithium Analysis Run 12/16/2021 2:07 PM View: AP 1
Plant McDonough Client: Southern Company Data: McDonough AP

Time Series



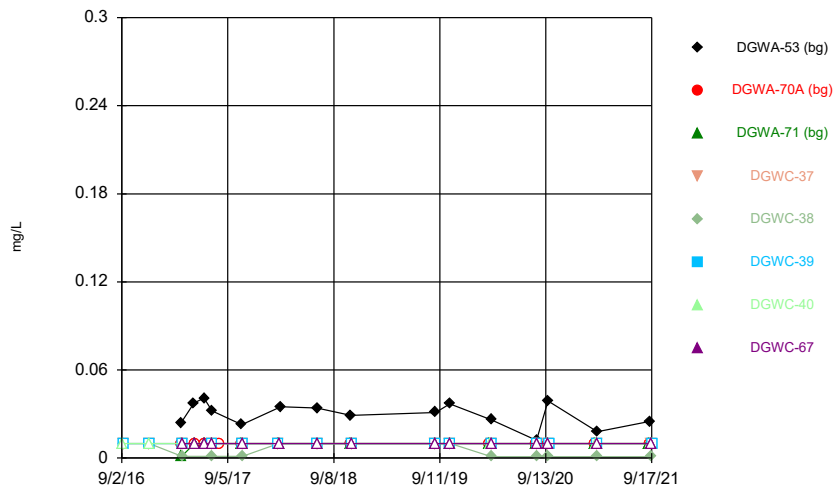
Constituent: Mercury Analysis Run 12/16/2021 2:07 PM View: AP 1
Plant McDonough Client: Southern Company Data: McDonough AP

Time Series



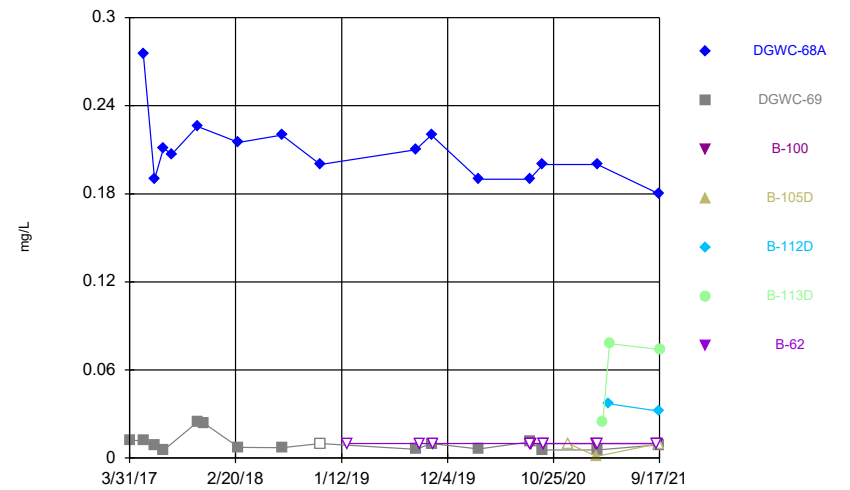
Constituent: Mercury Analysis Run 12/16/2021 2:07 PM View: AP 1
Plant McDonough Client: Southern Company Data: McDonough AP

Time Series



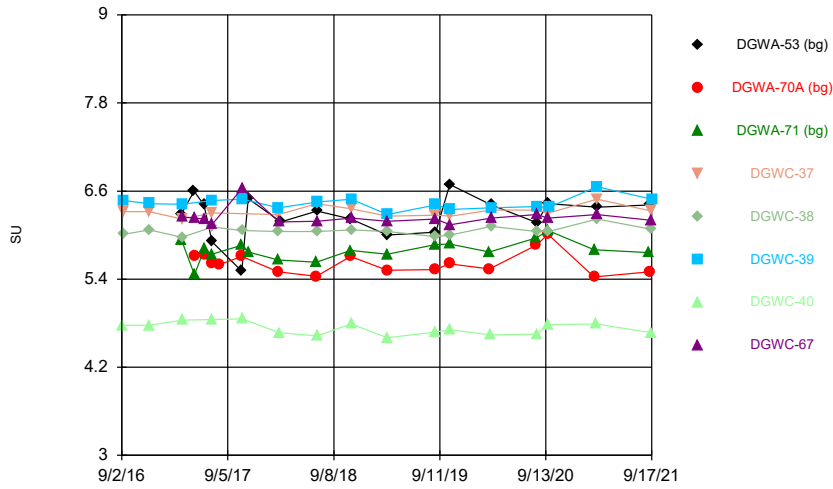
Constituent: Molybdenum Analysis Run 12/16/2021 2:07 PM View: AP 1
Plant McDonough Client: Southern Company Data: McDonough AP

Time Series



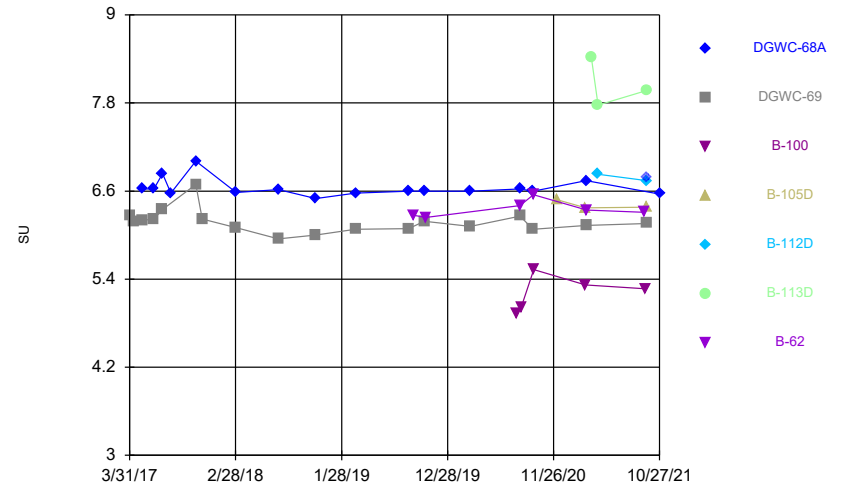
Constituent: Molybdenum Analysis Run 12/16/2021 2:07 PM View: AP 1
Plant McDonough Client: Southern Company Data: McDonough AP

Time Series



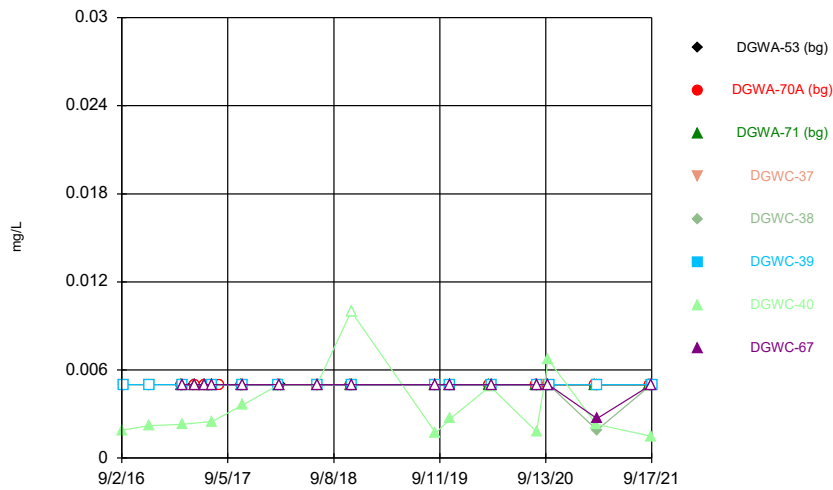
Constituent: pH, Field Analysis Run 12/16/2021 2:07 PM View: AP 1
 Plant McDonough Client: Southern Company Data: McDonough AP

Time Series



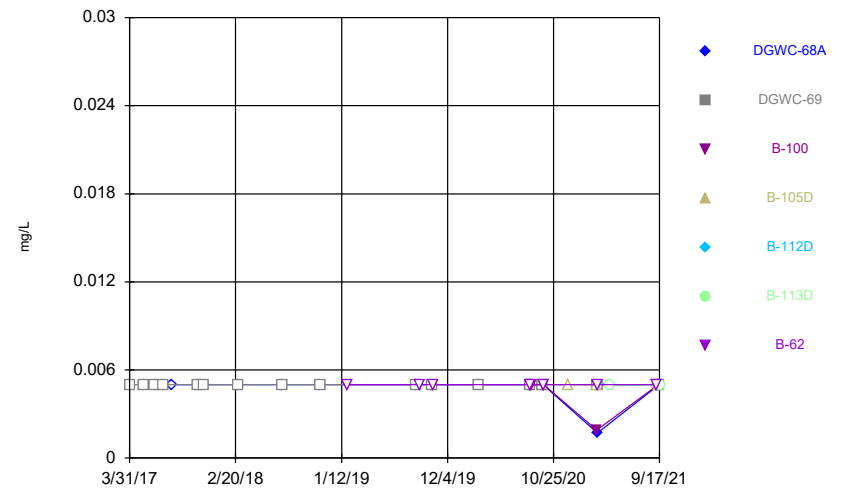
Constituent: pH, Field Analysis Run 12/16/2021 2:07 PM View: AP 1
 Plant McDonough Client: Southern Company Data: McDonough AP

Time Series



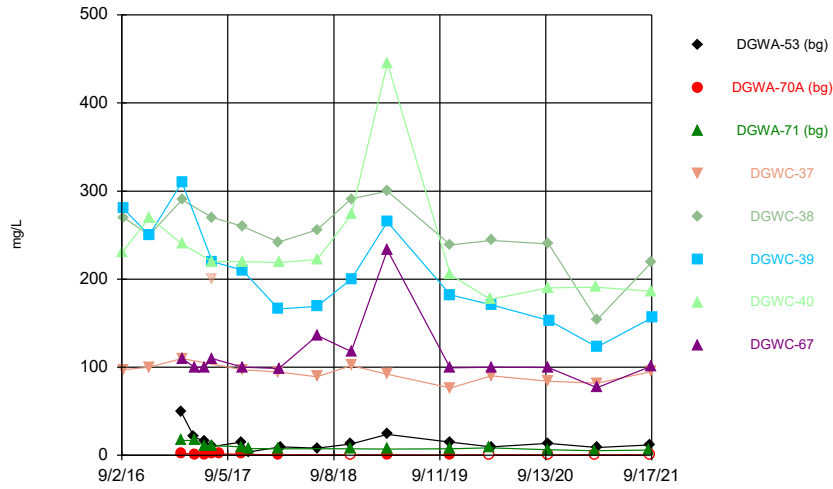
Constituent: Selenium Analysis Run 12/16/2021 2:07 PM View: AP 1
 Plant McDonough Client: Southern Company Data: McDonough AP

Time Series



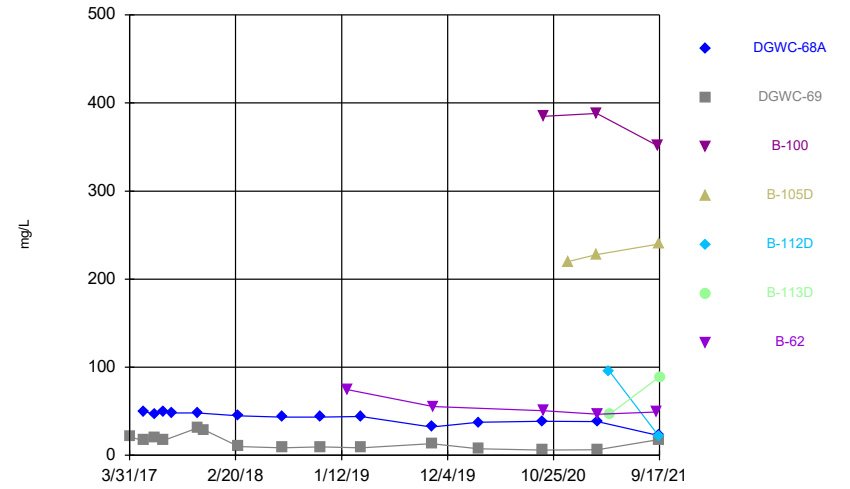
Constituent: Selenium Analysis Run 12/16/2021 2:07 PM View: AP 1
 Plant McDonough Client: Southern Company Data: McDonough AP

Time Series



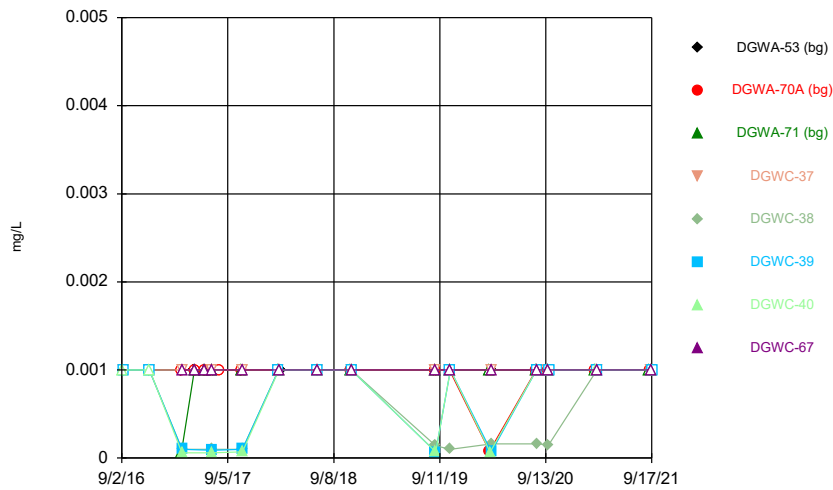
Constituent: Sulfate as SO4 Analysis Run 12/16/2021 2:07 PM View: AP 1
Plant McDonough Client: Southern Company Data: McDonough AP

Time Series



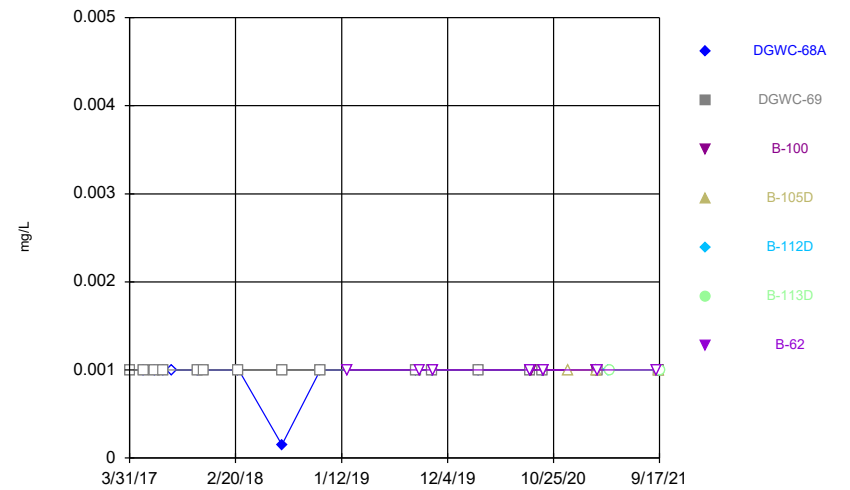
Constituent: Sulfate as SO4 Analysis Run 12/16/2021 2:07 PM View: AP 1
Plant McDonough Client: Southern Company Data: McDonough AP

Time Series



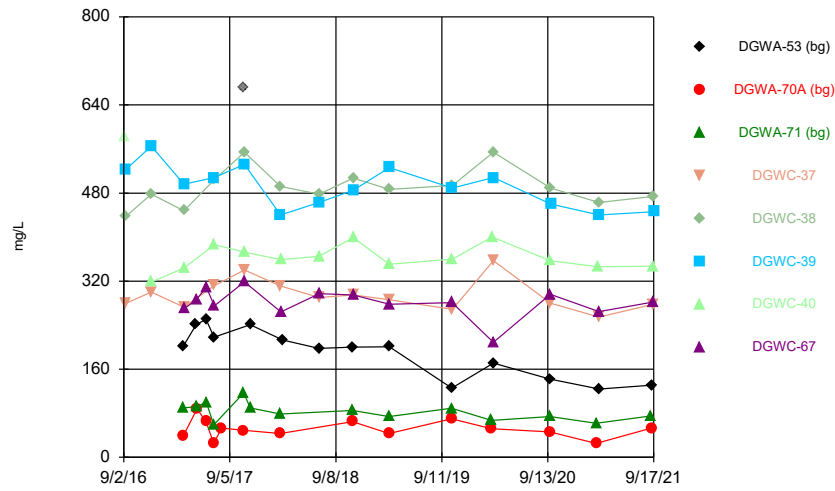
Constituent: Thallium Analysis Run 12/16/2021 2:07 PM View: AP 1
Plant McDonough Client: Southern Company Data: McDonough AP

Time Series



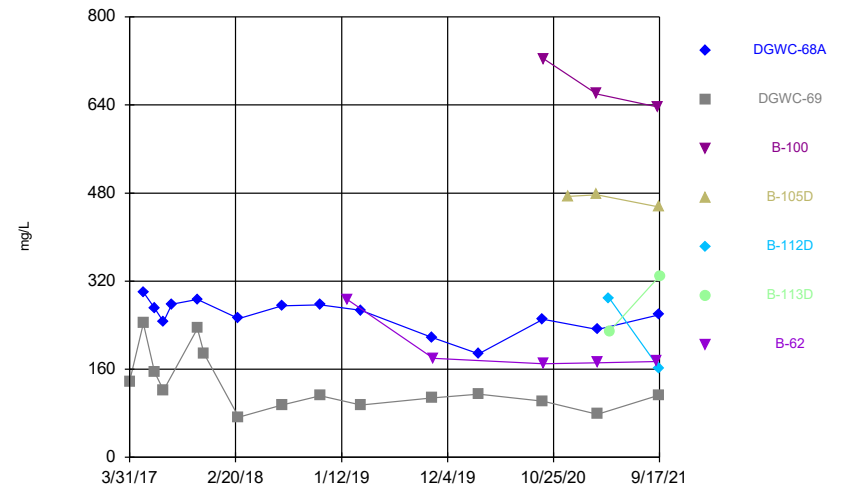
Constituent: Thallium Analysis Run 12/16/2021 2:07 PM View: AP 1
Plant McDonough Client: Southern Company Data: McDonough AP

Time Series



Constituent: Total Dissolved Solids [TDS] Analysis Run 12/16/2021 2:07 PM View: AP 1
 Plant McDonough Client: Southern Company Data: McDonough AP

Time Series



Constituent: Total Dissolved Solids [TDS] Analysis Run 12/16/2021 2:07 PM View: AP 1
 Plant McDonough Client: Southern Company Data: McDonough AP

Time Series

Constituent: Antimony (mg/L) Analysis Run 12/16/2021 2:08 PM View: AP 1

Plant McDonough Client: Southern Company Data: McDonough AP

	DGWA-53 (bg)	DGWA-70A (bg)	DGWA-71 (bg)	DGWC-37	DGWC-38	DGWC-39	DGWC-40	DGWC-67
9/2/2016							<0.003	
9/8/2016				<0.003	<0.003	<0.003		
12/7/2016				<0.003	<0.003	<0.003		
12/8/2016							<0.003	
3/28/2017	<0.003	<0.003	0.0007 (J)					
3/30/2017				<0.003	<0.003	<0.003	<0.003	
3/31/2017								0.0004 (J)
5/11/2017	<0.003							
5/12/2017			<0.003					<0.003
5/15/2017		<0.003						
6/15/2017	0.0006 (J)	<0.003						
6/16/2017			0.0007 (J)					0.0008 (J)
7/11/2017		<0.003	<0.003					
7/12/2017	<0.003							
7/13/2017				<0.003	<0.003	<0.003	<0.003	<0.003
8/8/2017		<0.003						
10/24/2017	<0.003	<0.003	<0.003					
10/26/2017				<0.003	<0.003	<0.003	<0.003	<0.003
2/27/2018		<0.003	<0.003					
3/1/2018				<0.003	<0.003	<0.003		
3/2/2018							<0.003	<0.003
3/8/2018	<0.003							
7/12/2018	<0.003			<0.003	<0.003	<0.003	<0.003	
7/13/2018								0.0023 (J)
11/6/2018		<0.003	<0.003					
11/7/2018	<0.003							
11/8/2018				<0.003	<0.003	<0.003	<0.003	<0.003
8/27/2019		<0.003	<0.003					
8/28/2019	<0.003			<0.003	<0.003	<0.003	<0.003	<0.003
10/15/2019		<0.003	<0.003					
10/16/2019	<0.003							
3/2/2020		<0.003	0.0018 (J)					
3/4/2020							<0.003	
3/9/2020	<0.003			<0.003	<0.003	<0.003		<0.003
8/11/2020		0.0013 (J)	0.0018 (J)					
8/13/2020	0.0003 (J)			<0.003	<0.003	<0.003	<0.003	<0.003
9/22/2020	<0.003	<0.003	<0.003					
9/23/2020							<0.003	<0.003
9/24/2020				<0.003	<0.003			
9/25/2020						<0.003		
3/1/2021		<0.003	0.0019 (J)					
3/8/2021							0.00033 (J)	
3/11/2021				<0.003	<0.003	<0.003		<0.003
3/12/2021	<0.003							
9/8/2021			<0.003					
9/9/2021	<0.003	0.0015 (J)						
9/14/2021							<0.003	
9/15/2021					<0.003			
9/16/2021				<0.003				<0.003
9/17/2021						<0.003		

Time Series

Constituent: Antimony (mg/L) Analysis Run 12/16/2021 2:08 PM View: AP 1
 Plant McDonough Client: Southern Company Data: McDonough AP

	DGWC-68A	DGWC-69	B-100	B-105D	B-112D	B-113D	B-62
3/31/2017		<0.003					
5/12/2017	<0.003	<0.003					
6/16/2017	0.0008 (J)	0.0007 (J)					
7/13/2017	<0.003	<0.003					
8/8/2017	<0.003						
10/26/2017	<0.003	<0.003					
11/15/2017		<0.003					
3/2/2018	<0.003	<0.003					
7/13/2018	<0.003	<0.003					
11/8/2018	<0.003	<0.003					
1/30/2019							<0.003
8/28/2019	<0.003	<0.003					
9/11/2019							<0.003
10/21/2019							<0.003
3/9/2020	<0.003	<0.003					
8/13/2020	<0.003	0.0019 (J)					<0.003
8/17/2020			0.0013 (J)				
9/23/2020	<0.003	<0.003					
9/24/2020							0.00046 (J)
9/25/2020			<0.003				
12/9/2020				<0.003			
3/8/2021			0.0017 (J)	0.00069 (J)			
3/10/2021	0.00032 (J)	0.0018 (J)					
3/12/2021							<0.003
4/15/2021					0.00041 (J)		
4/16/2021						0.0021 (J)	
9/9/2021							<0.003
9/13/2021			<0.003				
9/15/2021				0.0082			
9/16/2021	<0.003	<0.003			<0.003		
9/17/2021						<0.003	

Time Series

Constituent: Arsenic (mg/L) Analysis Run 12/16/2021 2:08 PM View: AP 1

Plant McDonough Client: Southern Company Data: McDonough AP

	DGWA-53 (bg)	DGWA-70A (bg)	DGWA-71 (bg)	DGWC-37	DGWC-38	DGWC-39	DGWC-40	DGWC-67
9/2/2016							<0.005	
9/8/2016				<0.005	<0.005	<0.005		
12/7/2016				0.0019 (J)	<0.005	<0.005		
12/8/2016							<0.005	
3/28/2017	0.0005 (J)	<0.005	<0.005					
3/30/2017				<0.005	<0.005	0.0007 (J)	0.0006 (J)	
3/31/2017								<0.005
5/11/2017	0.0005 (J)							
5/12/2017			0.0004 (J)					<0.005
5/15/2017		<0.005						
6/15/2017	<0.005	<0.005						
6/16/2017			<0.005					<0.005
7/11/2017		<0.005	<0.005					
7/12/2017	<0.005							
7/13/2017				<0.005	0.0005 (J)	0.0009 (J)	<0.005	<0.005
8/8/2017		<0.005						
10/24/2017	<0.005	<0.005	<0.005					
10/26/2017				<0.005	<0.005	<0.005	<0.005	<0.005
2/27/2018		<0.005	<0.005					
3/1/2018				<0.005	<0.005	0.0011 (J)		
3/2/2018							0.0011 (J)	<0.005
3/8/2018	<0.005							
7/12/2018	<0.005			<0.005	<0.005	0.00057 (J)	<0.005	
7/13/2018								<0.005
11/6/2018		<0.005	<0.005					
11/7/2018	<0.005 (J)							
11/8/2018				<0.005	<0.005	<0.005	<0.005	<0.005
8/27/2019		<0.005	<0.005					
8/28/2019	<0.005			<0.005	<0.005	<0.005	<0.005	<0.005
10/15/2019		0.00052 (J)	0.00071 (J)					
10/16/2019	0.0018 (J)							
10/17/2019								0.00042 (J)
10/18/2019				<0.005	<0.005	0.00075 (J)	<0.005	
3/2/2020		<0.005	<0.005					
3/4/2020							0.00065 (J)	
3/9/2020	0.00068 (J)			<0.005	<0.005	0.00039 (J)		<0.005
8/11/2020		<0.005	<0.005					
8/13/2020	<0.005			<0.005	<0.005	<0.005	<0.005	<0.005
9/22/2020	0.00093 (J)	<0.005	<0.005					
9/23/2020							<0.005	<0.005
9/24/2020				<0.005	<0.005			
9/25/2020						0.00087 (J)		
3/1/2021		<0.005	<0.005					
3/8/2021							<0.005	
3/11/2021				<0.005	<0.005	<0.005		0.0008 (J)
3/12/2021	<0.005							
9/8/2021			<0.005					
9/9/2021	<0.005	<0.005						
9/14/2021							<0.005	
9/15/2021					<0.005			
9/16/2021				<0.005				<0.005
9/17/2021						<0.005		

Time Series

Constituent: Arsenic (mg/L) Analysis Run 12/16/2021 2:08 PM View: AP 1

Plant McDonough Client: Southern Company Data: McDonough AP

	DGWC-68A	DGWC-69	B-100	B-105D	B-112D	B-113D	B-62
3/31/2017		0.0239					
4/12/2017		0.0077					
5/12/2017	<0.005	0.0097					
6/16/2017	<0.005	0.0113					
7/13/2017	<0.005	0.0029 (J)					
8/8/2017	<0.005						
10/26/2017	<0.005	0.114					
11/15/2017		0.164					
3/2/2018	<0.005	0.0127					
7/13/2018	<0.005	0.017					
11/8/2018	<0.005 (J)	0.02					
1/30/2019							<0.005
8/28/2019	<0.005	0.025					
9/11/2019							<0.005
10/16/2019	<0.005	0.023					
10/21/2019							<0.005
3/9/2020	<0.005	0.029					
7/23/2020			<0.005				
8/13/2020	<0.005	0.029					<0.005
8/17/2020			<0.005				
9/23/2020	<0.005	0.032					
9/24/2020							<0.005
9/25/2020			<0.005				
12/9/2020				<0.005			
3/8/2021			<0.005	0.0025 (J)			
3/10/2021	<0.005	0.028					
3/12/2021							<0.005
4/15/2021					0.00078 (J)		
4/16/2021						<0.005	
9/9/2021							<0.005
9/13/2021			<0.005				
9/15/2021				<0.005			
9/16/2021	0.46 (o)	0.023			<0.005		
9/17/2021						<0.005	
10/27/2021	0.0016 (J)						

Time Series

Constituent: Barium (mg/L) Analysis Run 12/16/2021 2:08 PM View: AP 1

Plant McDonough Client: Southern Company Data: McDonough AP

	DGWA-53 (bg)	DGWA-70A (bg)	DGWA-71 (bg)	DGWC-37	DGWC-38	DGWC-39	DGWC-40	DGWC-67
9/2/2016							0.0171	
9/8/2016				0.123	0.0333	0.0978		
12/7/2016				0.125	0.0336	0.0844		
12/8/2016							0.0163	
3/28/2017	0.134	0.0166	0.0378					
3/30/2017				0.11	0.0325	0.0858	0.0177	
3/31/2017								0.111
5/11/2017	0.126							
5/12/2017			0.04					0.127
5/15/2017		0.0181						
6/15/2017	0.14	0.0277						
6/16/2017			0.0369					0.11
7/11/2017		0.0306	0.0362					
7/12/2017	0.173							
7/13/2017				0.11	0.0332	0.0919	0.017	0.102
8/8/2017		0.0277						
10/24/2017	0.109	0.0333	0.0313					
10/26/2017				0.112	0.0333	0.0899	0.0168	0.105
2/27/2018		0.0341	0.0287					
3/1/2018				0.102	0.0333	0.0742		
3/2/2018							0.0169	0.104
3/8/2018	0.19							
7/12/2018	0.18			0.11	0.034	0.094	0.018	
7/13/2018								0.11
11/6/2018		0.037	0.026					
11/7/2018	0.15							
11/8/2018				0.11	0.035	0.1	0.017	0.11
8/27/2019		0.037	0.027					
8/28/2019	0.087			0.086	0.033	0.099	0.017	0.11
10/15/2019		0.034	0.024					
10/16/2019	0.077							
10/17/2019								0.1
10/18/2019				0.079	0.032	0.1	0.019	
3/2/2020		0.035	0.026					
3/4/2020							0.018	
3/9/2020	0.099			0.092	0.032	0.076		0.11
8/11/2020		0.041	0.026					
8/13/2020	0.046			0.088	0.032	0.089	0.018	0.095
9/22/2020	0.07	0.038	0.024					
9/23/2020							0.019	0.1
9/24/2020				0.094	0.032			
9/25/2020						0.1		
3/1/2021		0.042	0.028					
3/8/2021							0.016	
3/11/2021				0.075	0.032	0.078		0.11
3/12/2021	0.076							
9/8/2021			0.025					
9/9/2021	0.099	0.038						
9/14/2021							0.027	
9/15/2021					0.032			
9/16/2021				0.083				0.088
9/17/2021						0.09		

Time Series

Constituent: Barium (mg/L) Analysis Run 12/16/2021 2:08 PM View: AP 1

Plant McDonough Client: Southern Company Data: McDonough AP

	DGWC-68A	DGWC-69	B-100	B-105D	B-112D	B-113D	B-62
3/31/2017		0.0872					
5/12/2017	0.089	0.0929					
6/16/2017	0.0855	0.1					
7/13/2017	0.0859	0.0985					
8/8/2017	0.0852						
10/26/2017	0.0878	0.136					
11/15/2017		0.107					
3/2/2018	0.0878	0.0671					
7/13/2018	0.091	0.074					
11/8/2018	0.092	0.072					
1/30/2019							0.018
8/28/2019	0.089	0.061					
9/11/2019							0.023
10/16/2019	0.089	0.1					
10/21/2019							0.026
3/9/2020	0.088	0.057					
8/13/2020	0.088	0.13					0.026
8/17/2020			0.015				
9/23/2020	0.094	0.055					
9/24/2020							0.025
9/25/2020			0.022				
12/9/2020				0.03			
3/8/2021			0.022	0.041			
3/10/2021	0.09	0.048					
3/12/2021							0.027
4/15/2021					0.026		
4/16/2021						0.0032 (J)	
9/9/2021							0.021
9/13/2021			0.021				
9/15/2021				0.037			
9/16/2021	0.13 (o)	0.078			0.0032 (J)		
9/17/2021						0.0048 (J)	
10/27/2021	0.086						

Time Series

Constituent: Beryllium (mg/L) Analysis Run 12/16/2021 2:08 PM View: AP 1

Plant McDonough Client: Southern Company Data: McDonough AP

	DGWA-53 (bg)	DGWA-70A (bg)	DGWA-71 (bg)	DGWC-37	DGWC-38	DGWC-39	DGWC-40	DGWC-67
9/2/2016							0.0028 (J)	
9/8/2016				<0.0005	<0.0005	<0.0005		
12/7/2016				<0.0005	<0.0005	<0.0005		
12/8/2016							0.0026 (J)	
3/28/2017	<0.0005	<0.0005	9E-05 (J)					
3/30/2017				<0.0005	<0.0005	<0.0005	0.003	
3/31/2017								<0.0005
5/11/2017	<0.0005							
5/12/2017			<0.0005					<0.0005
5/15/2017		<0.0005						
6/15/2017	<0.0005	<0.0005						
6/16/2017			0.0001 (J)					<0.0005
7/11/2017		<0.0005	<0.0005					
7/12/2017	<0.0005							
7/13/2017				<0.0005	<0.0005	<0.0005	0.003 (J)	<0.0005
8/8/2017		<0.0005						
10/24/2017	<0.0005	<0.0005	<0.0005					
10/26/2017				<0.0005	<0.0005	<0.0005	0.0027 (J)	<0.0005
2/27/2018		<0.0005	<0.0005					
3/1/2018				<0.0005	<0.0005	<0.0005		
3/2/2018							0.0033	<0.0005
3/8/2018	<0.0005							
7/10/2018			0.0009 (J)					
7/12/2018	<0.0005			7E-05 (J)	<0.0005	<0.0005	0.0032	
7/13/2018								<0.0005
11/6/2018		0.00012 (J)	0.00013 (J)					
11/7/2018	<0.0005							
11/8/2018				<0.0005	<0.0005	<0.0005	<0.003 (J)	<0.0005
8/27/2019		7.9E-05 (J)	<0.0005					
8/28/2019	<0.0005			8.6E-05 (J)	<0.0005	<0.0005	0.0032	<0.0005
10/15/2019		<0.0005	8.8E-05 (J)					
10/16/2019	<0.0005							
10/17/2019								<0.0005
10/18/2019				<0.0005	<0.0005	<0.0005	0.0033	
3/2/2020		9.6E-05 (J)	0.0001 (J)					
3/4/2020							0.0039	
3/9/2020	<0.0005			<0.0005	<0.0005	<0.0005		<0.0005
8/11/2020		0.00013 (J)	0.00011 (J)					
8/13/2020	<0.0005			0.0001 (J)	<0.0005	<0.0005	0.0033	<0.0005
9/22/2020	<0.0005	6.8E-05 (J)	6.9E-05 (J)					
9/23/2020							0.0031	<0.0005
9/24/2020				8.8E-05 (J)	5.8E-05 (J)			
9/25/2020						<0.0005		
3/1/2021		0.00012 (J)	0.00011 (J)					
3/8/2021							0.003	
3/11/2021				<0.0005	<0.0005	<0.0005		<0.0005
3/12/2021	<0.0005							
9/8/2021			9.1E-05 (J)					
9/9/2021	<0.0005	8.9E-05 (J)						
9/14/2021							0.0032	
9/15/2021					<0.0005			
9/16/2021				5.9E-05 (J)				<0.0005

Time Series

Constituent: Beryllium (mg/L) Analysis Run 12/16/2021 2:08 PM View: AP 1
Plant McDonough Client: Southern Company Data: McDonough AP

	DGWA-53 (bg)	DGWA-70A (bg)	DGWA-71 (bg)	DGWC-37	DGWC-38	DGWC-39	DGWC-40	DGWC-67
9/17/2021						<0.0005		

Time Series

Constituent: Beryllium (mg/L) Analysis Run 12/16/2021 2:08 PM View: AP 1

Plant McDonough Client: Southern Company Data: McDonough AP

	DGWC-68A	DGWC-69	B-100	B-105D	B-112D	B-113D	B-62
10/6/2016							9E-05 (J)
3/31/2017		7E-05 (J)					
5/12/2017	<0.0005	<0.0005					
6/16/2017	<0.0005	<0.0005					
7/13/2017	<0.0005	<0.0005					
8/8/2017	<0.0005						
10/26/2017	<0.0005	<0.0005					
11/15/2017		<0.0005					
3/2/2018	<0.0005	<0.0005					
7/13/2018	8.4E-05 (J)	5.8E-05 (J)					
11/8/2018	<0.0005	<0.0005					
1/30/2019							<0.0005
8/28/2019	<0.0005	<0.0005					
9/11/2019							0.00012 (J)
10/16/2019	<0.0005	<0.0005					
10/21/2019							7.8E-05 (J)
3/9/2020	<0.0005	7.5E-05 (J)					
8/13/2020	<0.0005	6.3E-05 (J)					0.00011 (J)
8/17/2020			0.0004 (J)				
9/23/2020	<0.0005	6.1E-05 (J)					
9/24/2020							0.00013 (J)
9/25/2020			0.00035 (J)				
12/9/2020				<0.0005			
3/8/2021			0.00046 (J)	<0.0005			
3/10/2021	6.1E-05 (J)	5E-05 (J)					
3/12/2021							<0.0005
4/15/2021					<0.0005		
4/16/2021						<0.0005	
9/9/2021							0.00014 (J)
9/13/2021			0.00053				
9/15/2021				<0.0005			
9/16/2021	<0.0005	<0.0005			<0.0005		
9/17/2021						<0.0005	

Time Series

Constituent: Boron, total (mg/L) Analysis Run 12/16/2021 2:08 PM View: AP 1

Plant McDonough Client: Southern Company Data: McDonough AP

	DGWA-53 (bg)	DGWA-70A (bg)	DGWA-71 (bg)	DGWC-37	DGWC-38	DGWC-39	DGWC-40	DGWC-67
9/2/2016							0.895	
9/8/2016				1.58	2.69	3.35		
12/7/2016				2.01	3.08	3.63		
12/8/2016							0.841	
3/28/2017	0.0612	0.0067 (J)	0.0097 (J)					
3/30/2017				1.47	3.19	3.57	0.937	
3/31/2017								2.91
5/11/2017	0.0805							
5/12/2017			0.0082 (J)					3.24
5/15/2017		0.0073 (J)						
6/15/2017	0.0725	<0.04						
6/16/2017			0.0085 (J)					3.42
7/11/2017		<0.04	0.0077 (J)					
7/12/2017	0.0735							
7/13/2017				2.1	3.09	3.41	0.933	3.46
8/8/2017		<0.04						
10/24/2017	0.077	0.0082 (J)	0.0083 (J)					
10/26/2017				1.86	2.92	3.41	0.873	3.21
2/27/2018		0.0062 (J)	0.0069 (J)					
3/1/2018				1.87	3.08	2.86		
3/2/2018							0.974	3.49
3/8/2018	0.13 (J)							
7/12/2018	0.076			1.5	2.8	3	0.92	
7/13/2018								3.1
11/6/2018		<0.04 (J)	<0.04 (J)					
11/7/2018	0.073							
11/8/2018				1.4	3.4	3.4	0.8	3.5
3/12/2019		0.0073 (J)	0.0068 (J)					
3/13/2019	0.08			1.8	2.9	3.4	0.8	3.5
10/15/2019		<0.04	0.0054 (J)					
10/16/2019	0.059							
10/17/2019								3.6
10/18/2019				1.3	3.1	3.6	0.9	
3/2/2020		0.0055 (J)	0.01 (J)					
3/4/2020							0.86	
3/9/2020	0.08 (J)			1.8	3	2.9		3.6
9/22/2020	0.056 (J)	<0.04	<0.04					
9/23/2020							0.76	3.2
9/24/2020				1.6	2.9			
9/25/2020						3.3		
3/1/2021		<0.04	0.0054 (J)					
3/8/2021							0.72	
3/11/2021				1.4	2.7	2.5		3.4
3/12/2021	0.064							
9/8/2021			<0.04					
9/9/2021	0.065	<0.04						
9/14/2021							0.7	
9/15/2021					2.8			
9/16/2021				1.4				3.4
9/17/2021						2.8		

Time Series

Constituent: Boron, total (mg/L) Analysis Run 12/16/2021 2:08 PM View: AP 1

Plant McDonough Client: Southern Company Data: McDonough AP

	DGWC-68A	DGWC-69	B-100	B-105D	B-112D	B-113D	B-62
10/6/2016							0.053 (J)
3/31/2017		0.407					
4/12/2017		0.207					
5/12/2017	1.8	0.311					
6/16/2017	1.88	0.381					
7/13/2017	1.97	0.323					
8/8/2017	2.1						
10/26/2017	2.05	0.779					
11/15/2017		0.667					
3/2/2018	2.05	0.0478					
7/13/2018	1.7	0.043					
11/8/2018	1.8	0.054					
1/30/2019							0.14
3/13/2019	1.9	0.028 (J)					
9/11/2019							0.068
10/16/2019	1.5	0.38					
10/21/2019							0.058
3/9/2020	1.8	0.035 (J)					
9/23/2020	1.7	0.041 (J)					
9/24/2020							0.074 (J)
9/25/2020			0.27				
12/9/2020				0.79			
3/8/2021			0.24	0.64			
3/10/2021	1.7	0.024 (J)					
3/12/2021							0.092 (J)
3/26/2021						0.034 (J)	
4/15/2021					0.26		
4/16/2021						0.16	
9/9/2021							0.068
9/13/2021			0.24				
9/15/2021				0.76			
9/16/2021	1.3	0.32			0.27		
9/17/2021						0.089	

Time Series

Constituent: Cadmium (mg/L) Analysis Run 12/16/2021 2:08 PM View: AP 1

Plant McDonough Client: Southern Company Data: McDonough AP

	DGWA-53 (bg)	DGWA-70A (bg)	DGWA-71 (bg)	DGWC-37	DGWC-38	DGWC-39	DGWC-40	DGWC-67
9/2/2016							0.0008 (J)	
9/8/2016				0.0002 (J)	0.0002 (J)	<0.0005		
12/7/2016				0.0001 (J)	0.0002 (J)	<0.0005		
12/8/2016							0.0007 (J)	
3/28/2017	<0.0005	<0.0005	<0.0005					
3/30/2017				0.0001 (J)	0.0002 (J)	<0.0005	0.0007 (J)	
3/31/2017								<0.0005
5/11/2017	8E-05 (J)							
5/12/2017			<0.0005					<0.0005
5/15/2017		<0.0005						
6/15/2017	<0.0005	<0.0005						
6/16/2017			<0.0005					<0.0005
7/11/2017		<0.0005	<0.0005					
7/12/2017	<0.0005							
7/13/2017				<0.0005	0.0002 (J)	<0.0005	0.0008 (J)	<0.0005
8/8/2017		<0.0005						
10/24/2017	<0.0005	<0.0005	<0.0005					
10/26/2017				<0.0005	0.0002 (J)	<0.0005	0.0008 (J)	<0.0005
2/27/2018		<0.0005	<0.0005					
3/1/2018				<0.0005	<0.0005	<0.0005		
3/2/2018							<0.0005	<0.0005
3/8/2018	<0.0005							
7/12/2018	0.00013 (J)			<0.0005	0.00024 (J)	<0.0005	0.00087 (J)	
7/13/2018								<0.0005
11/6/2018		<0.0005	<0.0005					
11/7/2018	<0.0005							
11/8/2018				<0.0005	<0.001 (J)	<0.0005	<0.001 (J)	<0.0005
8/27/2019		<0.0005	<0.0005					
8/28/2019	<0.0005			<0.0005	0.0003 (J)	<0.0005	0.00087 (J)	0.00017 (J)
10/15/2019		<0.0005	<0.0005					
10/16/2019	<0.0005							
10/17/2019								<0.0005
10/18/2019				<0.0005	0.00016 (J)	<0.0005	0.00088 (J)	
3/2/2020		0.00041 (J)	<0.0005					
3/4/2020							0.00093 (J)	
3/9/2020	<0.0005			<0.0005	0.00017 (J)	<0.0005		0.00021 (J)
8/11/2020		<0.0005	<0.0005					
8/13/2020	<0.0005			<0.0005	0.00021 (J)	<0.0005	0.00084 (J)	0.00015 (J)
9/22/2020	<0.0005	<0.0005	<0.0005					
9/23/2020							0.0008 (J)	0.00018 (J)
9/24/2020				0.00027 (J)	0.00081 (J)			
9/25/2020						<0.0005		
3/1/2021		<0.0005	<0.0005					
3/8/2021							0.00072	
3/11/2021				<0.0005	<0.0005	<0.0005		0.00053
3/12/2021	<0.0005							
9/8/2021			<0.0005					
9/9/2021	<0.0005	<0.0005						
9/14/2021							0.00086	
9/15/2021					0.00021 (J)			
9/16/2021				0.00013 (J)				<0.0005
9/17/2021						<0.0005		

Time Series

Constituent: Cadmium (mg/L) Analysis Run 12/16/2021 2:08 PM View: AP 1

Plant McDonough Client: Southern Company Data: McDonough AP

	DGWC-68A	DGWC-69	B-100	B-105D	B-112D	B-113D	B-62
3/31/2017		0.0001 (J)					
5/12/2017	8E-05 (J)	0.0002 (J)					
6/16/2017	<0.0005	0.0002 (J)					
7/13/2017	<0.0005	<0.0005					
8/8/2017	<0.0005						
10/26/2017	<0.0005	<0.0005					
11/15/2017		<0.0005					
3/2/2018	<0.0005	<0.0005					
7/13/2018	0.00019 (J)	<0.0005					
11/8/2018	<0.001 (J)	<0.0005					
1/30/2019							<0.0005
8/28/2019	0.00017 (J)	<0.0005					
9/11/2019							<0.0005
10/16/2019	0.00017 (J)	0.00017 (J)					
10/21/2019							<0.0005
3/9/2020	0.00026 (J)	<0.0005					
8/13/2020	0.00021 (J)	<0.0005					<0.0005
8/17/2020			0.00059 (J)				
9/23/2020	0.00024 (J)	<0.0005					
9/24/2020							<0.0005
9/25/2020			0.00027 (J)				
12/9/2020				<0.0005			
3/8/2021			0.00027 (J)	<0.0005			
3/10/2021	<0.0005	<0.0005					
3/12/2021							<0.0005
4/15/2021					<0.0005		
4/16/2021						0.00019 (J)	
9/9/2021							<0.0005
9/13/2021			0.00029 (J)				
9/15/2021				<0.0005			
9/16/2021	<0.0005	<0.0005			<0.0005		
9/17/2021						<0.0005	

Time Series

Constituent: Calcium, total (mg/L) Analysis Run 12/16/2021 2:08 PM View: AP 1

Plant McDonough Client: Southern Company Data: McDonough AP

	DGWA-53 (bg)	DGWA-70A (bg)	DGWA-71 (bg)	DGWC-37	DGWC-38	DGWC-39	DGWC-40	DGWC-67
9/2/2016							39.6	
9/8/2016				52.5	70.3	87.2		
12/7/2016				29.7	38.4	96.7		
12/8/2016							37.9	
3/28/2017	30.8	5.14	8.31					
3/30/2017				62.6	80.3	98.9	43.9	
3/31/2017								39.9
5/11/2017	35.8							
5/12/2017			8.04					43.6
5/15/2017		6.5						
6/15/2017	36	5.38						
6/16/2017			7.66					42.5
7/11/2017		5.96	7.71					
7/12/2017	40.3							
7/13/2017				64.1	90.8	95	46.2	43.7
8/8/2017		5.2						
10/24/2017	30.3	4.93	6.86					
10/26/2017				60.8	81.3	90.6	41.8	40.4
2/27/2018		<25	<25					
3/1/2018				57	81.8	79.6		
3/2/2018							43.2	40.1
3/8/2018	39.8							
7/12/2018	34.7			59.1	86.7	89.8	47.1	
7/13/2018								43.3
11/6/2018		5.5	5.7					
11/7/2018	28.6							
11/8/2018				53.6	86.6	89	43.5	40.1
3/12/2019		5.1	5.5					
3/13/2019	26.7			54.8	85.3	96.3	41	41.2
10/15/2019		5.1	5.1					
10/16/2019	17.7							
10/17/2019								46.9
10/18/2019				52.5	97.8	108	44.9	
3/2/2020		5.3	5.8					
3/4/2020							49.6	
3/9/2020	23.7			64.2	91.9	100		46.9
9/22/2020	15.5	5	5.4					
9/23/2020							41.9	42
9/24/2020				55.9	84.1			
9/25/2020						92.5		
3/1/2021		4.1	5.9					
3/8/2021							44.9	
3/11/2021				56	85.8	91.9		45.4
3/12/2021	18.4							
9/8/2021			6.1					
9/9/2021	18.3	5.3						
9/14/2021							45.1	
9/15/2021					88.3			
9/16/2021				63				46
9/17/2021						98.6		

Time Series

Constituent: Calcium, total (mg/L) Analysis Run 12/16/2021 2:08 PM View: AP 1

Plant McDonough Client: Southern Company Data: McDonough AP

	DGWC-68A	DGWC-69	B-100	B-105D	B-112D	B-113D	B-62
3/31/2017		18.6 (J)					
5/12/2017	51.7	18.9 (J)					
6/16/2017	47.9	17.7					
7/13/2017	52.3	17.6					
8/8/2017	46.3						
10/26/2017	48.2	33.3					
11/15/2017		30.6					
3/2/2018	48.9	8.09					
7/13/2018	52.4	7.9					
11/8/2018	46.8	8.5					
1/30/2019							51.4
3/13/2019	47.5	7.6					
10/16/2019	49.7	16.2					
10/21/2019							31.2
3/9/2020	54	8.6					
9/23/2020	50.2	8					
9/24/2020							28.8
9/25/2020			44.7				
12/9/2020				76.9			
3/8/2021			47.7	79.6			
3/10/2021	54.2	8.5					
3/12/2021							28.8
4/15/2021					34.6		
4/16/2021						47.2	
9/9/2021							29.2
9/13/2021			51.5				
9/15/2021				72.7			
9/16/2021	60.6	18			28.4		
9/17/2021						44.1	

Time Series

Constituent: Chloride, Total (mg/L) Analysis Run 12/16/2021 2:08 PM View: AP 1

Plant McDonough Client: Southern Company Data: McDonough AP

	DGWA-53 (bg)	DGWA-70A (bg)	DGWA-71 (bg)	DGWC-37	DGWC-38	DGWC-39	DGWC-40	DGWC-67
9/2/2016							20	
9/8/2016				6.2	7.4	9.2		
12/7/2016				6.1	7.4	8.9		
12/8/2016							18	
3/28/2017	3.7	3.8	3.6					
3/30/2017				6.3	7.7	8.7	20	
3/31/2017								5.7
5/11/2017	2.3							
5/12/2017			3.8					5.6
5/15/2017		2.2						
6/15/2017	2.6	2						
6/16/2017			3.4					5.5
7/11/2017		2.1	3.1					
7/12/2017	2.3							
7/13/2017				6.5	7.5	8.4	21	5.2
8/8/2017		2.2						
10/24/2017	2.7	2.4	3.2					
10/26/2017				6.4	8.2	8.3	21	6
11/15/2017	2.2		3.1					
2/27/2018		2.5	3.2					
3/1/2018				6.3	8.1	8.1		
3/2/2018							19.5	5.8
3/8/2018	2.4							
7/12/2018	2.2			5.8	8	7.7	19.9	
7/13/2018								5.9
11/6/2018		2.3	2.6					
11/7/2018	2.3							
11/8/2018				5.8	8.1	7.7	19.3	6.1
3/12/2019		2.5	3.3					
3/13/2019	3.6			6.9	9.1	8.2	19.7	6.8
10/15/2019		2.2	3.3					
10/16/2019	2							
10/17/2019								6.9
10/18/2019				5.8	8.6	8	19.2	
3/2/2020		1.9	3					
3/4/2020							20.6	
3/9/2020	1.8			6	8.1	7.5		6.7
9/22/2020	1.6	1.9	5.2					
9/23/2020							19.7	7.1
9/24/2020				5.6	8.2			
9/25/2020						7.9		
3/1/2021		1.9	3.9					
3/8/2021							19.1	
3/11/2021				5.6	8	7.7		7.4
3/12/2021	2							
9/8/2021			5.9					
9/9/2021	1.8	1.9						
9/14/2021							16.7	
9/15/2021					7.6			
9/16/2021				5.6				7.9
9/17/2021						8.3		

Time Series

Constituent: Chloride, Total (mg/L) Analysis Run 12/16/2021 2:08 PM View: AP 1
Plant McDonough Client: Southern Company Data: McDonough AP

	DGWC-68A	DGWC-69	B-100	B-105D	B-112D	B-113D	B-62
3/31/2017		4.4					
5/12/2017	4.2	4.4					
6/16/2017	4.2	4.7					
7/13/2017	4.4	4.7					
8/8/2017	4.2						
10/26/2017	4.4	4.2					
11/15/2017		4.7					
3/2/2018	4.2	6.4					
7/13/2018	4	5.3					
11/8/2018	<0.25	5.9					
1/30/2019							7.1
3/13/2019	4.6	6.2					
10/16/2019	4.2	4.7					
10/21/2019							6.5
3/9/2020	3.6	5.7					
9/23/2020	3.6	4.7					
9/24/2020							5.7
9/25/2020			13.2				
12/9/2020				17.1			
3/8/2021			12.9	17.4			
3/10/2021	3.6	5					
3/12/2021							5.9
4/15/2021					10		
4/16/2021						6.7	
9/9/2021							5.8
9/13/2021			11.1				
9/15/2021				17.4			
9/16/2021	3.4	4.5			2.7		
9/17/2021						48.8	

Time Series

Constituent: Chromium (mg/L) Analysis Run 12/16/2021 2:08 PM View: AP 1

Plant McDonough Client: Southern Company Data: McDonough AP

	DGWA-53 (bg)	DGWA-70A (bg)	DGWA-71 (bg)	DGWC-37	DGWC-38	DGWC-39	DGWC-40	DGWC-67
9/2/2016							<0.005	
9/8/2016				<0.005	<0.005	<0.005		
12/7/2016				<0.005	<0.005	<0.005		
12/8/2016							<0.005	
3/28/2017	<0.005	0.0008 (J)	0.0023 (J)					
3/30/2017				<0.005	<0.005	<0.005	0.0007 (J)	
3/31/2017								0.0005 (J)
5/11/2017	<0.005							
5/12/2017			0.0004 (J)					0.0007 (J)
5/15/2017		0.0006 (J)						
6/15/2017	<0.005	0.0006 (J)						
6/16/2017			0.0005 (J)					<0.005
7/11/2017		0.0005 (J)	<0.005					
7/12/2017	<0.005							
7/13/2017				<0.005	<0.005	<0.005	0.0006 (J)	<0.005
8/8/2017		0.0005 (J)						
10/24/2017	<0.005	0.0005 (J)	<0.005					
10/26/2017				0.0007 (J)	0.0005 (J)	<0.005	0.0007 (J)	<0.005
2/27/2018		<0.005	<0.005					
3/1/2018				<0.005	<0.005	<0.005		
3/2/2018							<0.005	<0.005
3/8/2018	<0.005							
7/12/2018	<0.005			<0.005	<0.005	<0.005	<0.005	
7/13/2018								<0.005
11/6/2018		<0.005	<0.005					
11/7/2018	<0.005							
11/8/2018				<0.005	<0.005	<0.005	<0.005	<0.005
8/27/2019		0.00071 (J)	0.0018 (J)					
8/28/2019	<0.005			<0.005	<0.005	<0.005	0.00061 (J)	<0.005
10/15/2019		0.034 (O)	0.0025 (J)					
10/16/2019	<0.005							
10/17/2019								<0.005
10/18/2019				<0.005	0.00092 (J)	<0.005	0.00078 (J)	
3/2/2020		0.0013 (J)	0.00045 (J)					
3/4/2020							0.0011 (J)	
3/9/2020	<0.005			<0.005	0.00044 (J)	<0.005		0.00088 (J)
8/11/2020		0.0016 (J)	0.0006 (J)					
8/13/2020	<0.005			0.00058 (J)	<0.005	<0.005	0.00072 (J)	<0.005
9/22/2020	<0.005	0.00089 (J)	<0.005					
9/23/2020							0.0011 (J)	<0.005
9/24/2020				<0.005	<0.005			
9/25/2020						<0.005		
3/1/2021		<0.005	<0.005					
3/8/2021							0.0006 (J)	
3/11/2021				<0.005	<0.005	<0.005		0.0014 (J)
3/12/2021	<0.005							
9/8/2021			<0.005					
9/9/2021	<0.005	<0.005						
9/14/2021							0.0021 (J)	
9/15/2021					<0.005			
9/16/2021				<0.005				<0.005
9/17/2021						<0.005		

Time Series

Constituent: Chromium (mg/L) Analysis Run 12/16/2021 2:08 PM View: AP 1

Plant McDonough Client: Southern Company Data: McDonough AP

	DGWC-68A	DGWC-69	B-100	B-105D	B-112D	B-113D	B-62
3/31/2017		<0.005					
5/12/2017	<0.005	<0.005					
6/16/2017	<0.005	<0.005					
7/13/2017	0.0005 (J)	<0.005					
8/8/2017	<0.005						
10/26/2017	<0.005	<0.005					
11/15/2017		<0.005					
3/2/2018	<0.005	<0.005					
7/13/2018	<0.005	<0.005					
11/8/2018	<0.005	<0.005					
1/30/2019							<0.005
8/28/2019	<0.005	0.00049 (J)					
9/11/2019							<0.005
10/16/2019	<0.005	<0.005					
10/21/2019							0.00098 (J)
3/9/2020	<0.005	0.0012 (J)					
8/13/2020	<0.005	<0.005					<0.005
8/17/2020			<0.005				
9/23/2020	<0.005	0.0011 (J)					
9/24/2020							<0.005
9/25/2020			0.00094 (J)				
12/9/2020				<0.005			
3/8/2021			0.00057 (J)	<0.005			
3/10/2021	<0.005	0.0009 (J)					
3/12/2021							<0.005
4/15/2021					0.00085 (J)		
4/16/2021						0.0011 (J)	
9/9/2021							<0.005
9/13/2021			<0.005				
9/15/2021				0.0012 (J)			
9/16/2021	0.0014 (J,o)	<0.005			0.0014 (J)		
9/17/2021						<0.005	
10/27/2021	<0.005						

Time Series

Constituent: Cobalt (mg/L) Analysis Run 12/16/2021 2:08 PM View: AP 1

Plant McDonough Client: Southern Company Data: McDonough AP

	DGWA-53 (bg)	DGWA-70A (bg)	DGWA-71 (bg)	DGWC-37	DGWC-38	DGWC-39	DGWC-40	DGWC-67
9/2/2016							0.0382	
9/8/2016				<0.005	0.0015 (J)	0.0068 (J)		
12/7/2016				0.0005 (J)	0.0017 (J)	0.0071 (J)		
12/8/2016							0.0318	
3/28/2017	0.025	0.0034 (J)	0.0033 (J)					
3/30/2017				<0.005	0.0016 (J)	0.006 (J)	0.0364	
3/31/2017								0.0064 (J)
5/11/2017	0.0281							
5/12/2017			0.0016 (J)					0.0037 (J)
5/15/2017		0.0024 (J)						
6/15/2017	0.0322	0.0014 (J)						
6/16/2017			0.0011 (J)					0.0041 (J)
7/11/2017		0.0007 (J)	0.0008 (J)					
7/12/2017	0.0247							
7/13/2017				0.0003 (J)	0.0016 (J)	0.0063 (J)	0.0394	0.0037 (J)
8/8/2017		0.0007 (J)						
10/24/2017	0.0267	<0.005	0.0004 (J)					
10/26/2017				0.0003 (J)	0.0016 (J)	0.0062 (J)	0.0371	0.0022 (J)
2/27/2018		<0.005	<0.005					
3/1/2018				<0.005	<0.005	<0.005		
3/2/2018							0.0425	<0.005
3/8/2018	0.027							
7/12/2018	0.024			<0.005	0.0015 (J)	0.0059 (J)	0.044	
7/13/2018								0.0017 (J)
11/6/2018		<0.005	<0.005					
11/7/2018	0.018							
11/8/2018				<0.005	<0.01 (J)	<0.01 (J)	0.036	<0.01 (J)
8/27/2019		<0.005	<0.005					
8/28/2019	0.013			<0.005	0.0016 (J)	0.0067	0.044	0.0013 (J)
10/15/2019		0.00064 (J)	<0.005					
10/16/2019	0.009							
10/17/2019								0.0013 (J)
10/18/2019				<0.005	0.0016 (J)	0.007	0.043	
3/2/2020		0.00037 (J)	<0.005					
3/4/2020							0.055	
3/9/2020	0.016			<0.005	0.0016 (J)	0.007		0.0015 (J)
8/11/2020		0.0012 (J)	<0.005					
8/13/2020	0.0051			<0.005	0.0014 (J)	0.006	0.044	0.0015 (J)
9/22/2020	0.011	<0.005	<0.005					
9/23/2020							0.046	0.0011 (J)
9/24/2020				<0.005	0.0013 (J)			
9/25/2020						0.0061		
3/1/2021		<0.005	<0.005					
3/8/2021							0.039	
3/11/2021				<0.005	0.0017 (J)	0.0058		0.0016 (J)
3/12/2021	0.0078							
9/8/2021			<0.005					
9/9/2021	0.0064	<0.005						
9/14/2021							0.05	
9/15/2021					0.0016 (J)			
9/16/2021				<0.005				0.0012 (J)
9/17/2021						0.0076		

Time Series

Constituent: Cobalt (mg/L) Analysis Run 12/16/2021 2:08 PM View: AP 1

Plant McDonough Client: Southern Company Data: McDonough AP

	DGWC-68A	DGWC-69	B-100	B-105D	B-112D	B-113D	B-62
3/31/2017		0.0022 (J)					
5/12/2017	0.0015 (J)	0.0016 (J)					
6/16/2017	0.0003 (J)	0.0009 (J)					
7/13/2017	0.0005 (J)	0.0004 (J)					
8/8/2017	<0.005						
10/26/2017	<0.005	0.0031 (J)					
11/15/2017		0.0028 (J)					
3/2/2018	<0.005	<0.005					
7/13/2018	<0.005	<0.005					
11/8/2018	<0.005	<0.005					
1/30/2019							<0.005
8/28/2019	<0.005	<0.005					
9/11/2019							0.0003 (J)
10/16/2019	<0.005	<0.005					
10/21/2019							0.00031 (J)
3/9/2020	<0.005	<0.005					
7/23/2020			0.086				
8/3/2020			0.087				
8/13/2020	<0.005	<0.005					<0.005
8/17/2020			0.077				
9/23/2020	<0.005	<0.005					
9/24/2020							<0.005
9/25/2020			0.034				
12/9/2020				0.012			
3/8/2021			0.029	0.0042 (J)			
3/10/2021	<0.005	<0.005					
3/12/2021							<0.005
4/15/2021					0.0025 (J)		
4/16/2021						<0.005	
9/9/2021							<0.005
9/13/2021			0.035				
9/15/2021				0.0065			
9/16/2021	0.0032 (J,o)	<0.005			0.00054 (J)		
9/17/2021						<0.005	
10/27/2021	<0.005						

Time Series

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 12/16/2021 2:08 PM View: AP 1

Plant McDonough Client: Southern Company Data: McDonough AP

	DGWA-53 (bg)	DGWA-70A (bg)	DGWA-71 (bg)	DGWC-37	DGWC-38	DGWC-39	DGWC-40	DGWC-67
9/2/2016							1.44	
9/8/2016				0.827 (U)	1.48	1.44		
12/7/2016				0.56 (U)	0.22 (U)	2.16		
12/8/2016							2.56	
3/28/2017	6.36	0.866 (U)	0.257 (U)					
3/30/2017				0.302 (U)	0.519 (U)	0.264 (U)	0.0844 (U)	
3/31/2017								0.404 (U)
5/11/2017	3.45							
5/12/2017			0.165 (U)					0.206 (U)
5/15/2017		0.288 (U)						
6/15/2017	4.58	1.01 (U)						
6/16/2017			0.732 (U)					0.966 (U)
7/11/2017		0.254 (U)	0.461 (U)					
7/12/2017	4.37							
7/13/2017				0.731 (U)	1.11	0.517 (U)	0.963 (U)	0.387 (U)
8/8/2017		1.48						
10/24/2017	4.46	0.472 (U)	0.724 (U)					
10/26/2017				1.04 (U)	1.13 (U)	0.875 (U)	0.748 (U)	0.619 (U)
2/27/2018		1.22	0.714 (U)					
3/1/2018				0.344 (U)	0.985 (U)	1.24		
3/2/2018							0.485 (U)	1.31
3/8/2018	2.14							
7/10/2018		0.362 (U)	0.426 (U)					
7/12/2018	4.65			0.566 (U)	0.615 (U)	0.935 (U)	0.231 (U)	
7/13/2018								0.667 (U)
11/6/2018		0.859 (U)	0.455 (U)					
11/7/2018	3.05							
11/8/2018				0.623 (U)	0.58 (U)	1.15 (U)	0.465 (U)	0.911 (U)
8/27/2019		1.97	1.3 (U)					
8/28/2019	2.68			1.24 (U)	0.517 (U)	1.15 (U)	0.592 (U)	0.751 (U)
10/15/2019		0.319 (U)	1.21 (U)					
10/16/2019	1.89							
1/6/2020				2.01	0.527 (U)	1.4	1.6	0.965 (U)
3/2/2020		0.419 (U)	1.3					
3/4/2020							1.62	
3/9/2020	3.51			0.499 (U)	1.04	1.36		0.819 (U)
8/11/2020		0.812 (U)	0.965 (U)					
8/13/2020	1.04			0.99	0.132 (U)	0.626 (U)	1.6	0.897 (U)
9/22/2020	2.27	0.45 (U)	0.216 (U)					
9/23/2020							1.28 (U)	0.131 (U)
9/24/2020				1.03 (U)	0.593 (U)			
9/25/2020						0.181 (U)		
3/1/2021		0.552 (U)	0.389 (U)					
3/8/2021							0.714 (U)	
3/11/2021				0.956 (U)	0.0784 (U)	0.969 (U)		1.55
3/12/2021	1.63							
9/8/2021			0.051 (U)					
9/9/2021	2.72	0.779 (U)						
9/14/2021							1.8	
9/15/2021					2.37			
9/16/2021				0.691 (U)				0.201 (U)
9/17/2021						0.911 (U)		

Time Series

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 12/16/2021 2:08 PM View: AP 1
 Plant McDonough Client: Southern Company Data: McDonough AP

	DGWC-68A	DGWC-69	B-100	B-105D	B-112D	B-113D	B-62
3/31/2017		1.39					
5/12/2017	1.18	1.29					
6/16/2017	0.332 (U)	1.61					
7/13/2017	0.304 (U)	1.14					
8/8/2017	1.4						
10/26/2017	0.477 (U)	2.04					
11/15/2017		1.99					
3/2/2018	1.13	0.918 (U)					
7/13/2018	0.407 (U)	1.36 (U)					
11/8/2018	0.393 (U)	0.719 (U)					
1/30/2019							1.97 (U)
8/28/2019	1.77	1.38					
10/16/2019	2.12	0.826 (U)					
10/21/2019							1.82
3/9/2020	1.33	1.39					
8/13/2020	1.46	2.66					1.63
8/17/2020			1.4 (U)				
9/23/2020	0.563 (U)	1.8					
9/24/2020							1.28 (U)
9/25/2020			0.799 (U)				
12/9/2020				1.25 (U)			
3/8/2021			0.168 (U)	1.87			
3/10/2021	0.568 (U)	1.6					
3/12/2021							1.18 (U)
4/15/2021					0.945 (U)		
4/16/2021						0.852 (U)	
9/9/2021							1.7
9/13/2021			0.774 (U)				
9/15/2021				2.01			
9/16/2021	1.74	2.06			0.241 (U)		
9/17/2021						1.08 (U)	

Time Series

Constituent: Fluoride, total (mg/L) Analysis Run 12/16/2021 2:08 PM View: AP 1
Plant McDonough Client: Southern Company Data: McDonough AP

	DGWA-53 (bg)	DGWA-70A (bg)	DGWA-71 (bg)	DGWC-37	DGWC-38	DGWC-39	DGWC-40	DGWC-67
9/15/2021					0.06 (J)			
9/16/2021				0.084 (J)				0.069 (J)
9/17/2021						0.13		

Time Series

Constituent: Lead (mg/L) Analysis Run 12/16/2021 2:08 PM View: AP 1

Plant McDonough Client: Southern Company Data: McDonough AP

	DGWA-53 (bg)	DGWA-70A (bg)	DGWA-71 (bg)	DGWC-37	DGWC-38	DGWC-39	DGWC-40	DGWC-67
9/2/2016							<0.001	
9/8/2016				<0.001	<0.001	<0.001		
12/7/2016				<0.001	<0.001	<0.001		
12/8/2016							<0.001	
3/28/2017	<0.001	9E-05 (J)	<0.001					
3/30/2017				0.0014 (J)	<0.001	<0.001	7E-05 (J)	
3/31/2017								<0.001
5/11/2017	<0.001							
5/12/2017			8E-05 (J)					9E-05 (J)
5/15/2017		0.0001 (J)						
6/15/2017	<0.001	0.0002 (J)						
6/16/2017			<0.001					<0.001
7/11/2017		<0.001	<0.001					
7/12/2017	<0.001							
7/13/2017				<0.001	<0.001	<0.001	<0.001	<0.001
8/8/2017		7E-05 (J)						
10/24/2017	<0.001	<0.001	<0.001					
10/26/2017				<0.001	0.0001 (J)	<0.001	7E-05 (J)	<0.001
2/27/2018		<0.001	<0.001					
3/1/2018				<0.001	<0.001	<0.001		
3/2/2018							<0.001	<0.001
3/8/2018	<0.001							
7/12/2018	<0.001			<0.001	<0.001	<0.001	<0.001	
7/13/2018								<0.001
11/6/2018		<0.001	<0.001					
11/7/2018	<0.001							
11/8/2018				<0.001	<0.001	<0.001	<0.001	<0.001
8/27/2019		7.8E-05 (J)	<0.001					
8/28/2019	<0.001			6.1E-05 (J)	<0.001	8E-05 (J)	8.1E-05 (J)	<0.001
10/15/2019		<0.001	<0.001					
10/16/2019	<0.001							
10/17/2019								<0.001
10/18/2019				<0.001	7.4E-05 (J)	<0.001	0.00015 (J)	
3/2/2020		7.4E-05 (J)	<0.001					
3/4/2020							0.00017 (J)	
3/9/2020	<0.001			<0.001	6.1E-05 (J)	<0.001		4.7E-05 (J)
8/11/2020		0.0003 (J)	<0.001					
8/13/2020	<0.001			<0.001	<0.001	<0.001	4.9E-05 (J)	5.6E-05 (J)
9/22/2020	<0.001	7.8E-05 (J)	<0.001					
9/23/2020							0.00028 (J)	<0.001
9/24/2020				<0.001	0.00014 (J)			
9/25/2020						0.00022 (J)		
3/1/2021		<0.001	<0.001					
3/8/2021							5.4E-05 (J)	
3/11/2021				<0.001	0.00014 (J)	<0.001		0.00025 (J)
3/12/2021	<0.001							
9/8/2021			<0.001					
9/9/2021	<0.001	<0.001						
9/14/2021							<0.001	
9/15/2021					<0.001			
9/16/2021				<0.001				<0.001
9/17/2021						<0.001		

Time Series

Constituent: Lead (mg/L) Analysis Run 12/16/2021 2:08 PM View: AP 1
 Plant McDonough Client: Southern Company Data: McDonough AP

	DGWC-68A	DGWC-69	B-100	B-105D	B-112D	B-113D	B-62
3/31/2017		<0.001					
5/12/2017	<0.001	0.0001 (J)					
6/16/2017	<0.001	<0.001					
7/13/2017	<0.001	<0.001					
8/8/2017	<0.001						
10/26/2017	<0.001	<0.001					
11/15/2017		9E-05 (J)					
3/2/2018	<0.001	<0.001					
7/13/2018	<0.001	<0.001					
11/8/2018	<0.001	<0.001					
1/30/2019							<0.001
8/28/2019	<0.001	<0.001					
9/11/2019							<0.001
10/16/2019	<0.001	<0.001					
10/21/2019							<0.001
3/9/2020	<0.001	9E-05 (J)					
8/13/2020	<0.001	5.9E-05 (J)					<0.001
8/17/2020			8.8E-05 (J)				
9/23/2020	0.00035 (J)	0.00017 (J)					
9/24/2020							<0.001
9/25/2020			0.00021 (J)				
12/9/2020				5.2E-05 (J)			
3/8/2021			0.00018 (J)	<0.001			
3/10/2021	6.7E-05 (J)	0.0001 (J)					
3/12/2021							<0.001
4/15/2021					0.00014 (J)		
4/16/2021						0.00014 (J)	
9/9/2021							<0.001
9/13/2021			<0.001				
9/15/2021				<0.001			
9/16/2021	<0.001	<0.001			<0.001		
9/17/2021						<0.001	

Time Series

Constituent: Lithium (mg/L) Analysis Run 12/16/2021 2:08 PM View: AP 1

Plant McDonough Client: Southern Company Data: McDonough AP

	DGWA-53 (bg)	DGWA-70A (bg)	DGWA-71 (bg)	DGWC-37	DGWC-38	DGWC-39	DGWC-40	DGWC-67
9/2/2016							0.0022 (J)	
9/8/2016				<0.03	0.0032 (J)	<0.03		
12/7/2016				<0.03	0.0035 (J)	<0.03		
12/8/2016							<0.03	
3/28/2017	0.0108 (J)	0.0054 (J)	0.0025 (J)					
3/30/2017				0.0029 (J)	0.0035 (J)	<0.03	0.0023 (J)	
3/31/2017								0.0052 (J)
5/11/2017	0.0087 (J)							
5/12/2017			0.0016 (J)					0.0054 (J)
5/15/2017		0.002 (J)						
6/15/2017	0.0088 (J)	<0.03						
6/16/2017			0.0016 (J)					0.0048 (J)
7/11/2017		<0.03	<0.03					
7/12/2017	0.0075 (J)							
7/13/2017				<0.03	0.0032 (J)	<0.03	0.0023 (J)	0.0044 (J)
8/8/2017		<0.03						
10/24/2017	0.0103 (J)	<0.03	<0.03					
10/26/2017				0.0018 (J)	0.0034 (J)	<0.03	0.0021 (J)	0.0043 (J)
2/27/2018		<0.03	0.0013 (J)					
3/1/2018				0.0024 (J)	0.0033 (J)	<0.03		
3/2/2018							0.0023 (J)	0.0047 (J)
3/8/2018	0.011 (J)							
7/12/2018	0.0084 (J)			0.0028 (J)	0.0034 (J)	<0.03	0.0022 (J)	
7/13/2018								0.0041 (J)
11/6/2018		<0.03	<0.03					
11/7/2018	<0.03							
11/8/2018				<0.03	<0.03	<0.03	<0.03	<0.03
8/27/2019		<0.03	0.0014 (J)					
8/28/2019	0.0092 (J)			0.0025 (J)	0.0034 (J)	<0.03	0.0022 (J)	0.0046 (J)
10/15/2019		<0.03	0.0012 (J)					
10/16/2019	0.0094 (J)							
10/17/2019								0.0047 (J)
10/18/2019				0.0026 (J)	0.0032 (J)	<0.03	0.0024 (J)	
3/2/2020		<0.03	0.0011 (J)					
3/4/2020							0.0027 (J)	
3/9/2020	0.0077 (J)			0.0017 (J)	0.0033 (J)	<0.03		0.0048 (J)
8/11/2020		0.0019 (J)	0.0015 (J)					
8/13/2020	0.0085 (J)			0.0023 (J)	0.0028 (J)	<0.03	0.0022 (J)	0.0044 (J)
9/22/2020	0.0089 (J)	<0.03	0.0012 (J)					
9/23/2020							0.0022 (J)	0.0043 (J)
9/24/2020				0.0021 (J)	0.0029 (J)			
9/25/2020						<0.03		
3/1/2021		<0.03	0.0012 (J)					
3/8/2021							0.0022 (J)	
3/11/2021				0.0024 (J)	0.003 (J)	<0.03		0.005 (J)
3/12/2021	0.0083 (J)							
9/8/2021			0.0013 (J)					
9/9/2021	0.0091 (J)	<0.03						
9/14/2021							0.003 (J)	
9/15/2021					0.0029 (J)			
9/16/2021				0.0021 (J)				0.0044 (J)
9/17/2021						<0.03		

Time Series

Constituent: Lithium (mg/L) Analysis Run 12/16/2021 2:08 PM View: AP 1

Plant McDonough Client: Southern Company Data: McDonough AP

	DGWC-68A	DGWC-69	B-100	B-105D	B-112D	B-113D	B-62
3/31/2017		0.0031 (J)					
5/12/2017	0.0016 (J)	0.003 (J)					
6/16/2017	<0.03	0.0031 (J)					
7/13/2017	<0.03	0.0029 (J)					
8/8/2017	<0.03						
10/26/2017	<0.03	0.0034 (J)					
11/15/2017		0.0034 (J)					
3/2/2018	<0.03	0.0028 (J)					
7/13/2018	<0.03	0.0026 (J)					
11/8/2018	<0.03	<0.03					
1/30/2019							<0.03
8/28/2019	<0.03	0.0024 (J)					
9/11/2019							0.0078 (J)
10/16/2019	<0.03	0.0032 (J)					
10/21/2019							0.0078 (J)
3/9/2020	<0.03	0.0025 (J)					
8/13/2020	<0.03	0.0031 (J)					0.0087 (J)
8/17/2020			0.0013 (J)				
9/23/2020	<0.03	0.0023 (J)					
9/24/2020							0.0084 (J)
9/25/2020			0.0027 (J)				
12/9/2020				0.014 (J)			
3/8/2021			0.0024 (J)	0.015 (J)			
3/10/2021	<0.03	0.0023 (J)					
3/12/2021							0.0087 (J)
4/15/2021					0.0045 (J)		
4/16/2021						0.013 (J)	
9/9/2021							0.0094 (J)
9/13/2021			0.0022 (J)				
9/15/2021				0.014 (J)			
9/16/2021	0.00082 (J)	0.0023 (J)			0.0038 (J)		
9/17/2021						0.013 (J)	

Time Series

Constituent: Mercury (mg/L) Analysis Run 12/16/2021 2:08 PM View: AP 1

Plant McDonough Client: Southern Company Data: McDonough AP

	DGWA-53 (bg)	DGWA-70A (bg)	DGWA-71 (bg)	DGWC-37	DGWC-38	DGWC-39	DGWC-40	DGWC-67
9/2/2016							4.4E-05 (J)	
9/8/2016				<0.0002	<0.0002	<0.0002		
12/7/2016				<0.0002	<0.0002	<0.0002		
12/8/2016							<0.0002	
3/28/2017	<0.0002	<0.0002	<0.0002					
3/30/2017				6E-05 (J)	7E-05 (J)	5.9E-05 (J)	9E-05 (J)	
3/31/2017								<0.0002
5/11/2017	<0.0002							
5/12/2017			6E-05 (J)					<0.0002
5/15/2017		<0.0002						
6/15/2017	8E-05 (J)	7E-05 (J)						
6/16/2017			7E-05 (J)					7E-05 (J)
7/11/2017		<0.0002	<0.0002					
7/12/2017	<0.0002							
7/13/2017				<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
8/8/2017		<0.0002						
10/24/2017	<0.0002	<0.0002	<0.0002					
10/26/2017				<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
2/27/2018		<0.0002	<0.0002					
3/1/2018				<0.0002	<0.0002	<0.0002		
3/2/2018							<0.0002	<0.0002
3/8/2018	<0.0002							
7/12/2018	<0.0002			4.4E-05 (J)	4E-05 (J)	<0.0002	4.5E-05 (J)	
7/13/2018								<0.0002
11/6/2018		<0.0002	<0.0002					
11/7/2018	<0.0002							
11/8/2018				<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
8/27/2019		<0.0002	<0.0002					
8/28/2019	<0.0002			<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
10/15/2019		<0.0002	<0.0002					
10/16/2019	<0.0002							
10/17/2019								<0.0002
10/18/2019				<0.0002	<0.0002	<0.0002	<0.0002	
3/2/2020		<0.0002	<0.0002					
3/4/2020							<0.0002	
3/9/2020	<0.0002			<0.0002	<0.0002	<0.0002		<0.0002
8/11/2020		<0.0002	<0.0002					
8/13/2020	<0.0002			<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
9/22/2020	<0.0002	<0.0002	<0.0002					
9/23/2020							<0.0002	<0.0002
9/24/2020				9.1E-05 (J)	8.5E-05 (J)			
9/25/2020						<0.0002		
3/1/2021		<0.0002	9E-05 (J)					
3/12/2021	<0.0002							
9/8/2021			9.6E-05 (J)					
9/9/2021	<0.0002	<0.0002						
9/14/2021							<0.0002	
9/15/2021					<0.0002			
9/16/2021				<0.0002				<0.0002
9/17/2021						<0.0002		

Time Series

Constituent: Mercury (mg/L) Analysis Run 12/16/2021 2:08 PM View: AP 1
 Plant McDonough Client: Southern Company Data: McDonough AP

	DGWC-68A	DGWC-69	B-100	B-105D	B-112D	B-113D	B-62
3/31/2017		<0.0002					
5/12/2017	<0.0002	<0.0002					
6/16/2017	7E-05 (J)	7E-05 (J)					
7/13/2017	<0.0002	<0.0002					
8/8/2017	<0.0002						
10/26/2017	<0.0002	<0.0002					
11/15/2017		<0.0002					
3/2/2018	<0.0002	<0.0002					
7/13/2018	<0.0002	<0.0002					
11/8/2018	<0.0002	<0.0002					
1/30/2019							<0.0002
8/28/2019	<0.0002	<0.0002					
9/11/2019							<0.0002
10/16/2019	<0.0002	<0.0002					
10/21/2019							<0.0002
3/9/2020	<0.0002	<0.0002					
8/13/2020	<0.0002	<0.0002					<0.0002
8/17/2020			0.00011 (J)				
9/23/2020	<0.0002	<0.0002					
9/24/2020							<0.0002
9/25/2020			<0.0002				
12/9/2020				8.7E-05 (J)			
3/12/2021							<0.0002
4/15/2021					<0.0002		
4/16/2021						<0.0002	
9/9/2021							<0.0002
9/13/2021			<0.0002				
9/15/2021				<0.0002			
9/16/2021	<0.0002	<0.0002			<0.0002		
9/17/2021						<0.0002	

Time Series

Constituent: Molybdenum (mg/L) Analysis Run 12/16/2021 2:08 PM View: AP 1

Plant McDonough Client: Southern Company Data: McDonough AP

	DGWA-53 (bg)	DGWA-70A (bg)	DGWA-71 (bg)	DGWC-37	DGWC-38	DGWC-39	DGWC-40	DGWC-67
9/2/2016							<0.01	
9/8/2016				<0.01	<0.01	<0.01		
12/7/2016				<0.01	<0.01	<0.01		
12/8/2016							<0.01	
3/28/2017	0.0242	<0.01	0.0009 (J)					
3/30/2017				<0.01	0.0011 (J)	<0.01	<0.01	
3/31/2017								<0.01
5/11/2017	0.0375							
5/12/2017			<0.01					<0.01
5/15/2017		<0.01						
6/15/2017	0.0409	<0.01						
6/16/2017			<0.01					<0.01
7/11/2017		<0.01	<0.01					
7/12/2017	0.0321							
7/13/2017				<0.01	0.0012 (J)	<0.01	<0.01	<0.01
8/8/2017		<0.01						
10/24/2017	0.0227	<0.01	<0.01					
10/26/2017				<0.01	0.0011 (J)	<0.01	<0.01	<0.01
2/27/2018		<0.01	<0.01					
3/1/2018				<0.01	<0.01	<0.01		
3/2/2018							<0.01	<0.01
3/8/2018	0.035							
7/12/2018	0.034			<0.01	<0.01	<0.01	<0.01	
7/13/2018								<0.01
11/6/2018		<0.01	<0.01					
11/7/2018	0.029							
11/8/2018				<0.01	<0.01	<0.01	<0.01	<0.01
8/27/2019		<0.01	<0.01					
8/28/2019	0.031			<0.01	<0.01	<0.01	<0.01	<0.01
10/15/2019		<0.01	<0.01					
10/16/2019	0.037							
10/17/2019								<0.01
10/18/2019				<0.01	<0.01	<0.01	<0.01	
3/2/2020		<0.01	<0.01					
3/4/2020							<0.01	
3/9/2020	0.026			<0.01	0.001 (J)	<0.01		<0.01
8/11/2020		<0.01	<0.01					
8/13/2020	0.012			<0.01	0.00098 (J)	<0.01	<0.01	<0.01
9/22/2020	0.039	<0.01	<0.01					
9/23/2020							<0.01	<0.01
9/24/2020				<0.01	0.001 (J)			
9/25/2020						<0.01		
3/1/2021		<0.01	<0.01					
3/8/2021							<0.01	
3/11/2021				<0.01	0.00092 (J)	<0.01		<0.01
3/12/2021	0.018							
9/8/2021			<0.01					
9/9/2021	0.025	<0.01						
9/14/2021							<0.01	
9/15/2021					0.00099 (J)			
9/16/2021				<0.01				<0.01
9/17/2021						<0.01		

Time Series

Constituent: Molybdenum (mg/L) Analysis Run 12/16/2021 2:08 PM View: AP 1

Plant McDonough Client: Southern Company Data: McDonough AP

	DGWC-68A	DGWC-69	B-100	B-105D	B-112D	B-113D	B-62
3/31/2017		0.0124					
5/12/2017	0.275	0.0117					
6/16/2017	0.19	0.0087 (J)					
7/13/2017	0.211	0.0053 (J)					
8/8/2017	0.207						
10/26/2017	0.226	0.0244					
11/15/2017		0.0237					
3/2/2018	0.215	0.0072 (J)					
7/13/2018	0.22	0.007 (J)					
11/8/2018	0.2	<0.01 (J)					
1/30/2019							<0.01
8/28/2019	0.21	0.0059 (J)					
9/11/2019							<0.01
10/16/2019	0.22	0.01					
10/21/2019							<0.01
3/9/2020	0.19	0.0062 (J)					
8/13/2020	0.19	0.011					<0.01
8/17/2020			<0.01				
9/23/2020	0.2	0.0056 (J)					
9/24/2020							<0.01
9/25/2020			<0.01				
12/9/2020				<0.01			
3/8/2021			<0.01	0.0011 (J)			
3/10/2021	0.2	0.0056 (J)					
3/12/2021							<0.01
3/26/2021						0.025	
4/15/2021					0.037		
4/16/2021						0.078	
9/9/2021							<0.01
9/13/2021			<0.01				
9/15/2021				<0.01			
9/16/2021	0.18	0.009 (J)			0.032		
9/17/2021						0.074	

Time Series

Constituent: pH, Field (SU) Analysis Run 12/16/2021 2:08 PM View: AP 1

Plant McDonough Client: Southern Company Data: McDonough AP

	DGWA-53 (bg)	DGWA-70A (bg)	DGWA-71 (bg)	DGWC-37	DGWC-38	DGWC-39	DGWC-40	DGWC-67
9/2/2016							4.77	
9/8/2016				6.32	6.01	6.47		
12/7/2016				6.32	6.07	6.43		
12/8/2016							4.77	
3/28/2017	6.29		5.94					
3/30/2017				6.22	5.97	6.42	4.84	
3/31/2017								6.25
5/11/2017	6.6							
5/12/2017			5.46					6.23
5/15/2017		5.72						
6/15/2017	6.41	5.74						
6/16/2017			5.81					6.22
7/11/2017		5.62	5.74					
7/12/2017	5.91							
7/13/2017				6.3	6.11	6.47	4.85	6.15
8/8/2017		5.6						
10/24/2017	5.51	5.71	5.86					
10/26/2017					6.06	6.49	4.86	6.64
11/15/2017	6.5		5.77					
2/27/2018		5.5	5.66					
3/1/2018				6.28	6.05	6.37		
3/2/2018							4.67	6.18
3/8/2018	6.18							
7/10/2018		5.44	5.63					
7/12/2018	6.33			6.43	6.05	6.45	4.63	
7/13/2018								6.19
11/6/2018		5.71	5.79					
11/7/2018	6.22							
11/8/2018				6.36	6.07	6.49	4.79	6.23
3/12/2019		5.52	5.74					
3/13/2019	6			6.26	6.05	6.28	4.6	6.19
8/27/2019		5.53	5.87					
8/28/2019	6.04			6.27	5.98	6.41	4.68	6.22
10/15/2019		5.61	5.88					
10/16/2019	6.69							
10/17/2019								6.14
10/18/2019				6.26	6	6.35	4.71	
3/2/2020		5.54	5.77					
3/4/2020							4.64	
3/9/2020	6.41			6.34	6.12	6.37		6.23
8/11/2020		5.86	5.96					
8/13/2020	6.17			6.34	6.05	6.39	4.65	6.28
9/22/2020	6.43	6.01	6.06					
9/23/2020							4.78	6.23
9/24/2020				6.3	6.05			
9/25/2020						6.38		
3/1/2021		5.43	5.8					
3/8/2021							4.79	
3/11/2021				6.49	6.22	6.66		6.28
3/12/2021	6.38							
9/8/2021			5.76					
9/9/2021	6.41	5.5						

Time Series

Constituent: pH, Field (SU) Analysis Run 12/16/2021 2:08 PM View: AP 1
Plant McDonough Client: Southern Company Data: McDonough AP

	DGWA-53 (bg)	DGWA-70A (bg)	DGWA-71 (bg)	DGWC-37	DGWC-38	DGWC-39	DGWC-40	DGWC-67
9/14/2021							4.67	
9/15/2021					6.08			
9/16/2021				6.33				6.2
9/17/2021						6.49		

Time Series

Constituent: pH, Field (SU) Analysis Run 12/16/2021 2:08 PM View: AP 1

Plant McDonough Client: Southern Company Data: McDonough AP

	DGWC-68A	DGWC-69	B-100	B-105D	B-112D	B-113D	B-62
3/31/2017		6.26					
4/12/2017		6.19					
5/12/2017	6.63	6.2					
6/16/2017	6.63	6.22					
7/13/2017	6.84	6.35					
8/8/2017	6.57						
10/26/2017	7.01	6.69					
11/15/2017		6.22					
3/2/2018	6.58	6.1					
7/13/2018	6.62	5.95					
11/8/2018	6.5	6					
3/13/2019	6.57	6.08					
8/28/2019	6.6	6.09					
9/11/2019							6.27
10/16/2019	6.6	6.19					
10/21/2019							6.24
3/9/2020	6.6	6.12					
8/3/2020			4.93				
8/13/2020	6.63	6.26					6.4
8/17/2020			5.02				
9/23/2020	6.6	6.08					
9/24/2020							6.55
9/25/2020			5.53				
12/9/2020				6.48			
3/8/2021			5.32	6.37			
3/10/2021	6.74	6.13					
3/12/2021							6.34
3/26/2021						8.42	
4/15/2021					6.83		
4/16/2021						7.77	
9/9/2021							6.31
9/13/2021			5.27				
9/15/2021				6.38			
9/16/2021	6.79 (o)	6.16			6.74		
9/17/2021						7.97	
10/27/2021	6.56						

Time Series

Constituent: Selenium (mg/L) Analysis Run 12/16/2021 2:08 PM View: AP 1

Plant McDonough Client: Southern Company Data: McDonough AP

	DGWA-53 (bg)	DGWA-70A (bg)	DGWA-71 (bg)	DGWC-37	DGWC-38	DGWC-39	DGWC-40	DGWC-67
9/2/2016							0.0019 (J)	
9/8/2016				<0.005	<0.005	<0.005		
12/7/2016				<0.005	<0.005	<0.005		
12/8/2016							0.0022 (J)	
3/28/2017	<0.005	<0.005	<0.005					
3/30/2017				<0.005	<0.005	<0.005	0.0023 (J)	
3/31/2017								<0.005
5/11/2017	<0.005							
5/12/2017			<0.005					<0.005
5/15/2017		<0.005						
6/15/2017	<0.005	<0.005						
6/16/2017			<0.005					<0.005
7/11/2017		<0.005	<0.005					
7/12/2017	<0.005							
7/13/2017				<0.005	<0.005	<0.005	0.0025 (J)	<0.005
8/8/2017		<0.005						
10/24/2017	<0.005	<0.005	<0.005					
10/26/2017				<0.005	<0.005	<0.005	0.0036 (J)	<0.005
2/27/2018		<0.005	<0.005					
3/1/2018				<0.005	<0.005	<0.005		
3/2/2018							<0.005	<0.005
3/8/2018	<0.005							
7/12/2018	<0.005			<0.005	<0.005	<0.005	<0.005	
7/13/2018								<0.005
11/6/2018		<0.005	<0.005					
11/7/2018	<0.005							
11/8/2018				<0.005	<0.005	<0.005	<0.01 (J)	<0.005
8/27/2019		<0.005	<0.005					
8/28/2019	<0.005			<0.005	<0.005	<0.005	0.0017 (J)	<0.005
10/15/2019		<0.005	<0.005					
10/16/2019	<0.005							
10/17/2019								<0.005
10/18/2019				<0.005	<0.005	<0.005	0.0027 (J)	
3/2/2020		<0.005	<0.005					
3/4/2020							0.0049 (J)	
3/9/2020	<0.005			<0.005	<0.005	<0.005		<0.005
8/11/2020		<0.005	<0.005					
8/13/2020	<0.005			<0.005	<0.005	<0.005	0.0018 (J)	<0.005
9/22/2020	<0.005	<0.005	<0.005					
9/23/2020							0.0067 (J)	<0.005
9/24/2020				<0.005	<0.005			
9/25/2020						<0.005		
3/1/2021		<0.005	<0.005					
3/8/2021							0.0023 (J)	
3/11/2021				<0.005	0.0019 (J)	<0.005		0.0027 (J)
3/12/2021	<0.005							
9/8/2021			<0.005					
9/9/2021	<0.005	<0.005						
9/14/2021							0.0015 (J)	
9/15/2021					<0.005			
9/16/2021				<0.005				<0.005
9/17/2021						<0.005		

Time Series

Constituent: Selenium (mg/L) Analysis Run 12/16/2021 2:08 PM View: AP 1

Plant McDonough Client: Southern Company Data: McDonough AP

	DGWC-68A	DGWC-69	B-100	B-105D	B-112D	B-113D	B-62
3/31/2017		<0.005					
5/12/2017	<0.005	<0.005					
6/16/2017	<0.005	<0.005					
7/13/2017	<0.005	<0.005					
8/8/2017	<0.005						
10/26/2017	<0.005	<0.005					
11/15/2017		<0.005					
3/2/2018	<0.005	<0.005					
7/13/2018	<0.005	<0.005					
11/8/2018	<0.005	<0.005					
1/30/2019							<0.005
8/28/2019	<0.005	<0.005					
9/11/2019							<0.005
10/16/2019	<0.005	<0.005					
10/21/2019							<0.005
3/9/2020	<0.005	<0.005					
8/13/2020	<0.005	<0.005					<0.005
8/17/2020			<0.005				
9/23/2020	<0.005	<0.005					
9/24/2020							<0.005
9/25/2020			<0.005				
12/9/2020				<0.005			
3/8/2021			0.0019 (J)	<0.005			
3/10/2021	0.0017 (J)	<0.005					
3/12/2021							<0.005
4/15/2021					<0.005		
4/16/2021						<0.005	
9/9/2021							<0.005
9/13/2021			<0.005				
9/15/2021				<0.005			
9/16/2021	<0.005	<0.005			<0.005		
9/17/2021						<0.005	

Time Series

Constituent: Sulfate as SO4 (mg/L) Analysis Run 12/16/2021 2:08 PM View: AP 1

Plant McDonough Client: Southern Company Data: McDonough AP

	DGWA-53 (bg)	DGWA-70A (bg)	DGWA-71 (bg)	DGWC-37	DGWC-38	DGWC-39	DGWC-40	DGWC-67
9/2/2016							230	
9/8/2016				97	270	280		
12/7/2016				100	250	250		
12/8/2016							270	
3/28/2017	49	2.7	17					
3/30/2017				110	290	310	240	
3/31/2017								110
5/11/2017	21							
5/12/2017			17					100
5/15/2017		1						
6/15/2017	16	0.86 (J)						
6/16/2017			11					100
7/11/2017		1.4	11					
7/12/2017	10							
7/13/2017				200 (O)	270	220	220	110
8/8/2017		1.5						
10/24/2017	15	1.4	9.6					
10/26/2017				97	260	210	220	100
11/15/2017	3.8		7.8					
2/27/2018		0.54 (J)	7.4					
3/1/2018				94.6	242	166		
3/2/2018							219	98.5
3/8/2018	9.7							
7/12/2018	8			89.2	256	169	222	
7/13/2018								136
11/6/2018		<1 (J)	7.3					
11/7/2018	12.8							
11/8/2018				102	291	200	273	118
3/12/2019		0.35 (J)	7					
3/13/2019	23.7			92.2	300	265	445	233
10/15/2019		0.16 (J)	7.4					
10/16/2019	15.1							
10/17/2019								99.4
10/18/2019				76.4	239	182	205	
3/2/2020		<1	8.5					
3/4/2020							177	
3/9/2020	9.5			90.3	244	171		100
9/22/2020	13.5	<1	6.5					
9/23/2020							190	99.8
9/24/2020				84.1	240			
9/25/2020						153		
3/1/2021		<1	5.2					
3/8/2021							191	
3/11/2021				81.9	154	123		76.7
3/12/2021	8.8							
9/8/2021			6.1					
9/9/2021	11.9	<1						
9/14/2021							186	
9/15/2021					219			
9/16/2021				95				101
9/17/2021						156		

Time Series

Constituent: Sulfate as SO4 (mg/L) Analysis Run 12/16/2021 2:08 PM View: AP 1

Plant McDonough Client: Southern Company Data: McDonough AP

	DGWC-68A	DGWC-69	B-100	B-105D	B-112D	B-113D	B-62
3/31/2017		21					
5/12/2017	50	17					
6/16/2017	47	20					
7/13/2017	49	17					
8/8/2017	48						
10/26/2017	48	31					
11/15/2017		29					
3/2/2018	44.7	10.1					
7/13/2018	43.3	8.6					
11/8/2018	43.5	9.7					
1/30/2019							74.7
3/13/2019	44.1	8.4					
10/16/2019	32.1	13.3					
10/21/2019							55.3
3/9/2020	37.4	7.6					
9/23/2020	38.7	5.9					
9/24/2020							50.6
9/25/2020			385				
12/9/2020				220			
3/8/2021			388	228			
3/10/2021	38.4	6.4					
3/12/2021							46.5
4/15/2021					95.6		
4/16/2021						46.5	
9/9/2021							49.2
9/13/2021			351				
9/15/2021				240			
9/16/2021	22.3	17.9			21.2		
9/17/2021						89.1	

Time Series

Constituent: Thallium (mg/L) Analysis Run 12/16/2021 2:08 PM View: AP 1

Plant McDonough Client: Southern Company Data: McDonough AP

	DGWA-53 (bg)	DGWA-70A (bg)	DGWA-71 (bg)	DGWC-37	DGWC-38	DGWC-39	DGWC-40	DGWC-67
9/2/2016							<0.001	
9/8/2016				<0.001	<0.001	<0.001		
12/7/2016				<0.001	<0.001	<0.001		
12/8/2016							<0.001	
3/28/2017	<0.001	<0.001	6E-05 (J)					
3/30/2017				<0.001	0.0001 (J)	0.0001 (J)	6E-05 (J)	
3/31/2017								<0.001
5/11/2017	<0.001							
5/12/2017			<0.001					<0.001
5/15/2017		<0.001						
6/15/2017	<0.001	<0.001						
6/16/2017			<0.001					<0.001
7/11/2017		<0.001	<0.001					
7/12/2017	<0.001							
7/13/2017				<0.001	0.0001 (J)	9E-05 (J)	6E-05 (J)	<0.001
8/8/2017		<0.001						
10/24/2017	<0.001	<0.001	<0.001					
10/26/2017				<0.001	0.0001 (J)	0.0001 (J)	7E-05 (J)	<0.001
2/27/2018		<0.001	<0.001					
3/1/2018				<0.001	<0.001	<0.001		
3/2/2018							<0.001	<0.001
3/8/2018	<0.001							
7/12/2018	<0.001			<0.001	<0.001	<0.001	<0.001	
7/13/2018								<0.001
11/6/2018		<0.001	<0.001					
11/7/2018	<0.001							
11/8/2018				<0.001	<0.001	<0.001	<0.001	<0.001
8/27/2019		<0.001	<0.001					
8/28/2019	<0.001			<0.001	0.00014 (J)	6.9E-05 (J)	7E-05 (J)	<0.001
10/15/2019		<0.001	<0.001					
10/16/2019	<0.001							
10/17/2019								<0.001
10/18/2019				<0.001	0.0001 (J)	<0.001	<0.001	
3/2/2020		7.8E-05 (J)	<0.001					
3/4/2020							6.8E-05 (J)	
3/9/2020	<0.001			<0.001	0.00016 (J)	7.1E-05 (J)		<0.001
8/11/2020		<0.001	<0.001					
8/13/2020	<0.001			<0.001	0.00016 (J)	<0.001	<0.001	<0.001
9/22/2020	<0.001	<0.001	<0.001					
9/23/2020							<0.001	<0.001
9/24/2020				<0.001	0.00015 (J)			
9/25/2020						<0.001		
3/1/2021		<0.001	<0.001					
3/8/2021							<0.001	
3/11/2021				<0.001	<0.001	<0.001		<0.001
3/12/2021	<0.001							
9/8/2021			<0.001					
9/9/2021	<0.001	<0.001						
9/14/2021							<0.001	
9/15/2021					<0.001			
9/16/2021				<0.001				<0.001
9/17/2021						<0.001		

Time Series

Constituent: Total Dissolved Solids [TDS] (mg/L) Analysis Run 12/16/2021 2:08 PM View: AP 1

Plant McDonough Client: Southern Company Data: McDonough AP

	DGWA-53 (bg)	DGWA-70A (bg)	DGWA-71 (bg)	DGWC-37	DGWC-38	DGWC-39	DGWC-40	DGWC-67
9/2/2016							583 (O)	
9/8/2016				279	437	522		
12/7/2016				300	478	565		
12/8/2016							319	
3/28/2017	202	39	90					
3/30/2017				273	448	496	344	
3/31/2017								270
5/11/2017	241							
5/12/2017			92					287
5/15/2017		88						
6/15/2017	251	65						
6/16/2017			100					309
7/11/2017		25	59					
7/12/2017	218							
7/13/2017				312	504	508	386	275
8/8/2017		53						
10/24/2017	671 (O)	49	117					
10/26/2017				340	554	532	373	319
11/15/2017	241		90					
2/27/2018		43	79					
3/1/2018				311	492	440		
3/2/2018							359	264
3/8/2018	213							
7/12/2018	198			290	478	463	365	
7/13/2018								297
11/6/2018		65	85					
11/7/2018	200							
11/8/2018				295	507	485	399	295
3/12/2019		43	74					
3/13/2019	201			286	487	526	351	278
10/15/2019		70	89					
10/16/2019	126							
10/17/2019								281
10/18/2019				269	494	489	360	
3/2/2020		52	67					
3/4/2020							400	
3/9/2020	171			357	554	508		209
9/22/2020	142	46	74					
9/23/2020							357	296
9/24/2020				280	489			
9/25/2020						460		
3/1/2021		25	62					
3/8/2021							346	
3/11/2021				255	463	440		265
3/12/2021	124							
9/8/2021			75					
9/9/2021	131	53						
9/14/2021							347	
9/15/2021					474			
9/16/2021				278				282
9/17/2021						446		

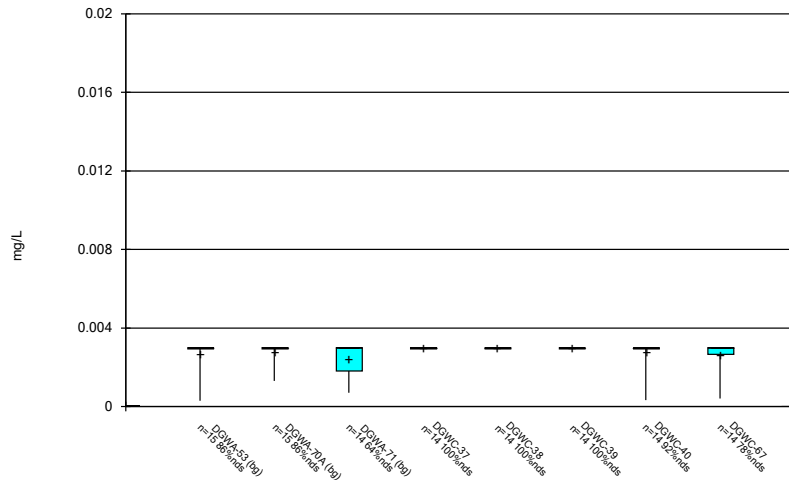
Time Series

Constituent: Total Dissolved Solids [TDS] (mg/L) Analysis Run 12/16/2021 2:08 PM View: AP 1
Plant McDonough Client: Southern Company Data: McDonough AP

	DGWC-68A	DGWC-69	B-100	B-105D	B-112D	B-113D	B-62
3/31/2017		138					
5/12/2017	300	243					
6/16/2017	271	155					
7/13/2017	246	122					
8/8/2017	278						
10/26/2017	287	234					
11/15/2017		188					
3/2/2018	252	73					
7/13/2018	275	95					
11/8/2018	277	112					
1/30/2019							287
3/13/2019	267	95					
10/16/2019	218	108					
10/21/2019							180
3/9/2020	188	115					
9/23/2020	251	102					
9/24/2020							170
9/25/2020			724				
12/9/2020				474			
3/8/2021			660	477			
3/10/2021	232	78					
3/12/2021							172
4/15/2021					289		
4/16/2021						229	
9/9/2021							174
9/13/2021			636				
9/15/2021				455			
9/16/2021	259	113			162		
9/17/2021						329	

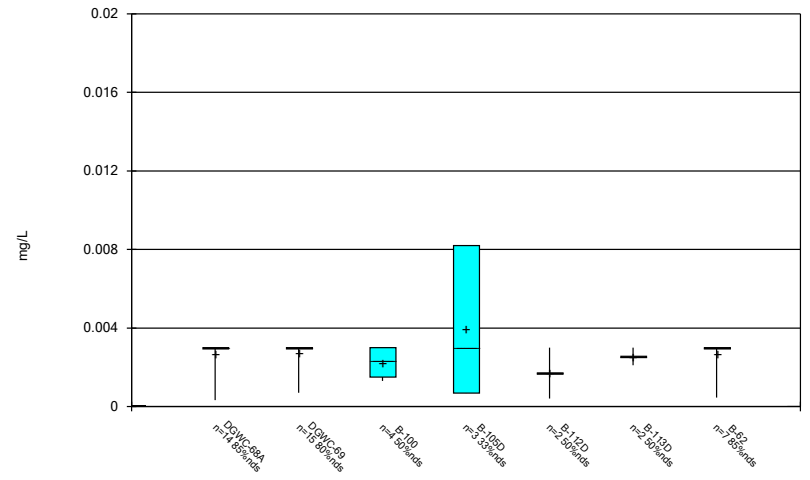
FIGURE B.

Box & Whiskers Plot



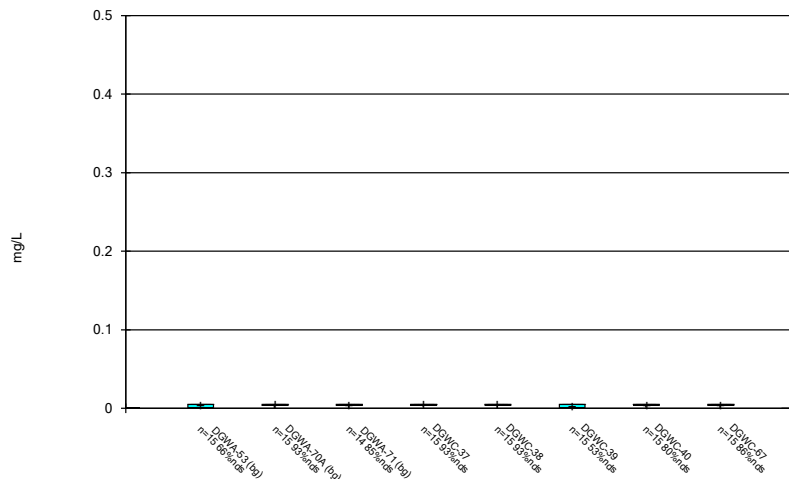
Constituent: Antimony Analysis Run 12/16/2021 2:13 PM View: AP 1
 Plant McDonough Client: Southern Company Data: McDonough AP

Box & Whiskers Plot



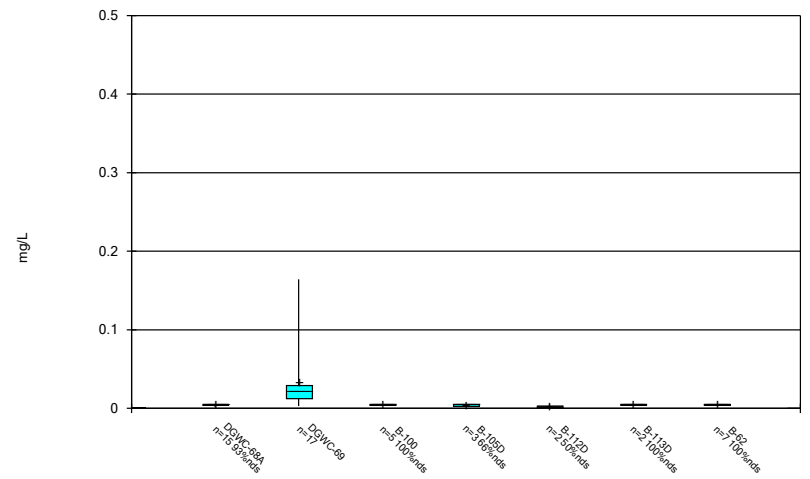
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 Plant McDonough Client: Southern Company Data: McDonough AP

Box & Whiskers Plot



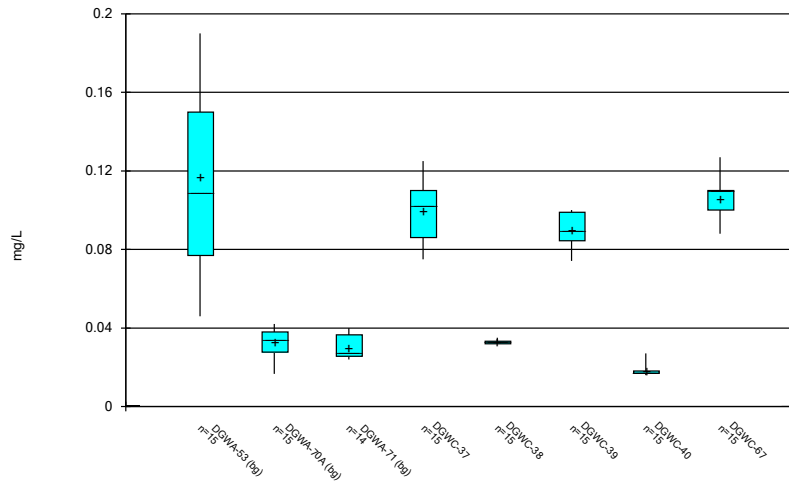
Constituent: Arsenic Analysis Run 12/16/2021 2:13 PM View: AP 1
 Plant McDonough Client: Southern Company Data: McDonough AP

Box & Whiskers Plot



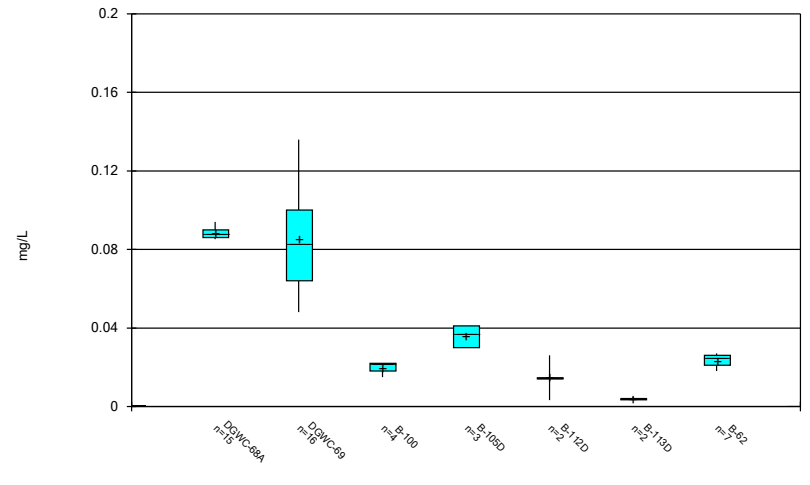
Constituent: Arsenic Analysis Run 12/16/2021 2:13 PM View: AP 1
 Plant McDonough Client: Southern Company Data: McDonough AP

Box & Whiskers Plot



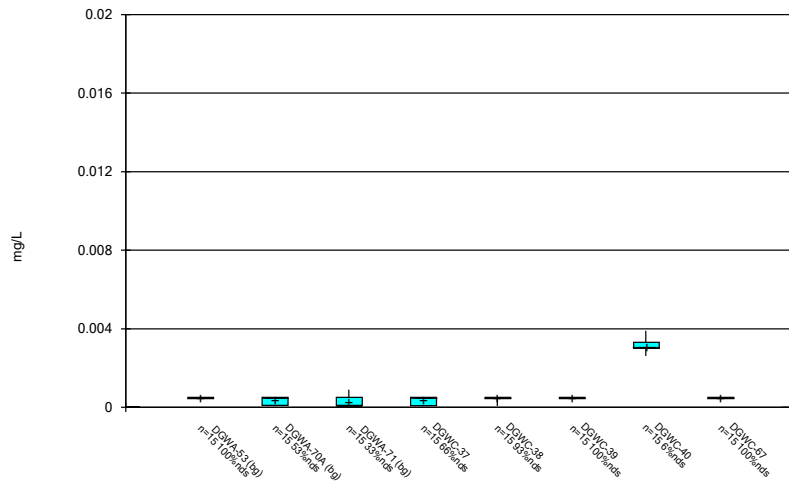
Constituent: Barium Analysis Run 12/16/2021 2:13 PM View: AP 1
 Plant McDonough Client: Southern Company Data: McDonough AP

Box & Whiskers Plot



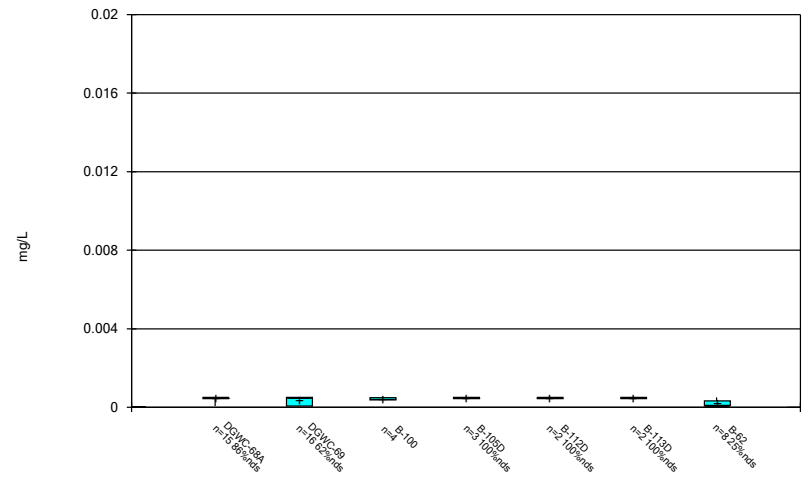
Constituent: Barium Analysis Run 12/16/2021 2:13 PM View: AP 1
 Plant McDonough Client: Southern Company Data: McDonough AP

Box & Whiskers Plot



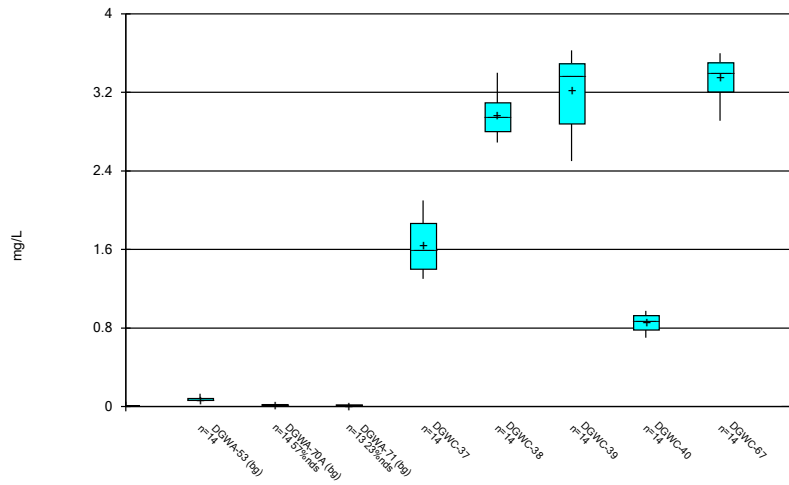
Constituent: Beryllium Analysis Run 12/16/2021 2:13 PM View: AP 1
 Plant McDonough Client: Southern Company Data: McDonough AP

Box & Whiskers Plot



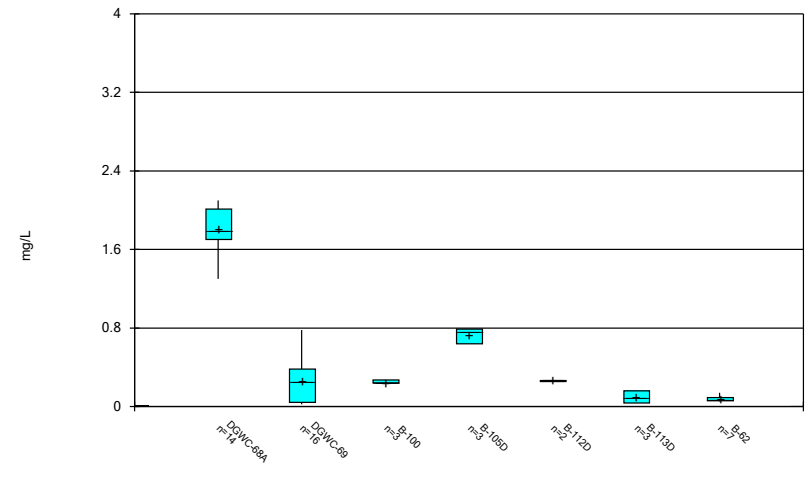
Constituent: Beryllium Analysis Run 12/16/2021 2:13 PM View: AP 1
 Plant McDonough Client: Southern Company Data: McDonough AP

Box & Whiskers Plot



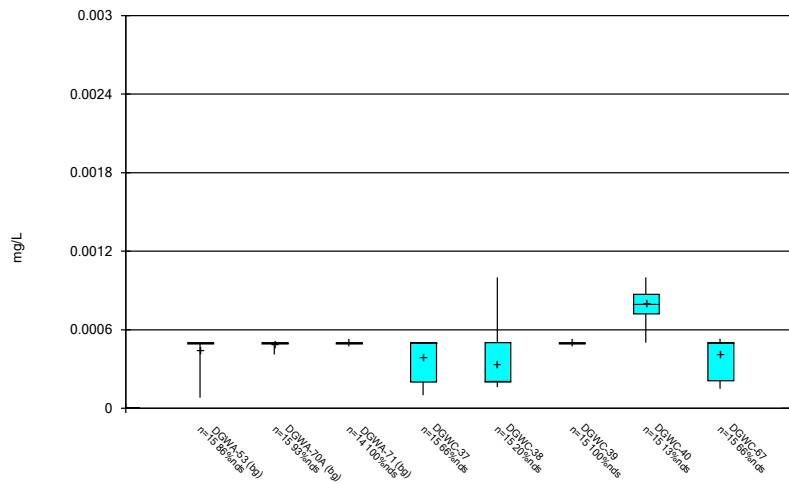
Constituent: Boron, total Analysis Run 12/16/2021 2:13 PM View: AP 1
 Plant McDonough Client: Southern Company Data: McDonough AP

Box & Whiskers Plot



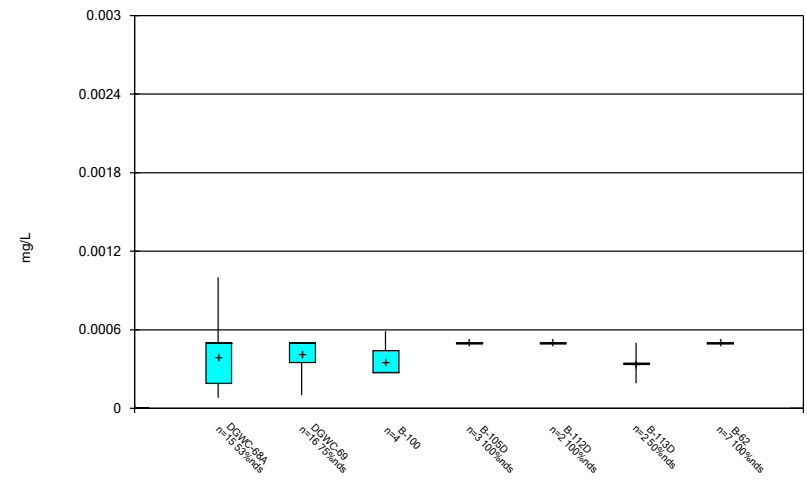
Constituent: Boron, total Analysis Run 12/16/2021 2:13 PM View: AP 1
 Plant McDonough Client: Southern Company Data: McDonough AP

Box & Whiskers Plot



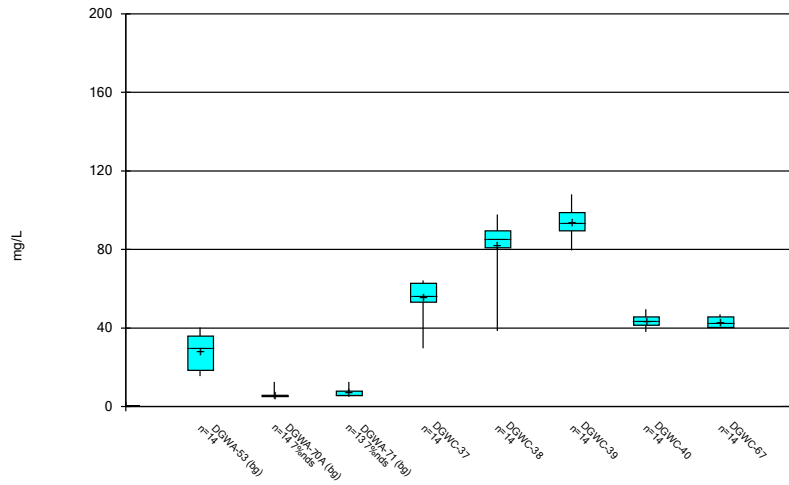
Constituent: Cadmium Analysis Run 12/16/2021 2:13 PM View: AP 1
 Plant McDonough Client: Southern Company Data: McDonough AP

Box & Whiskers Plot



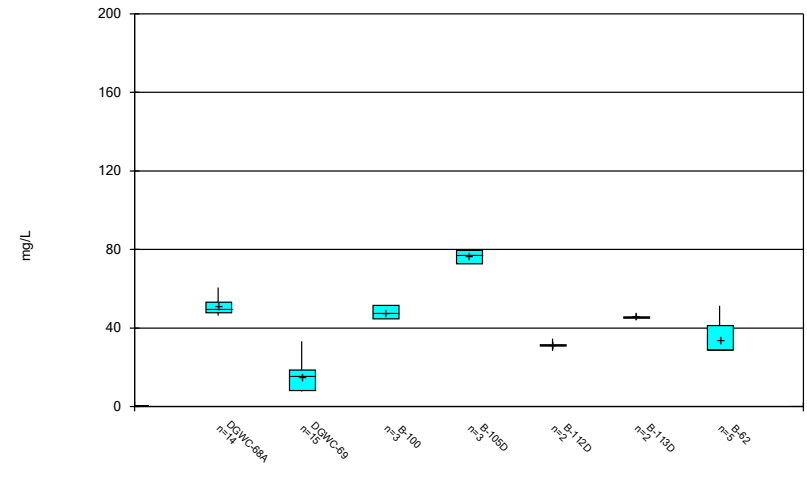
Constituent: Cadmium Analysis Run 12/16/2021 2:13 PM View: AP 1
 Plant McDonough Client: Southern Company Data: McDonough AP

Box & Whiskers Plot



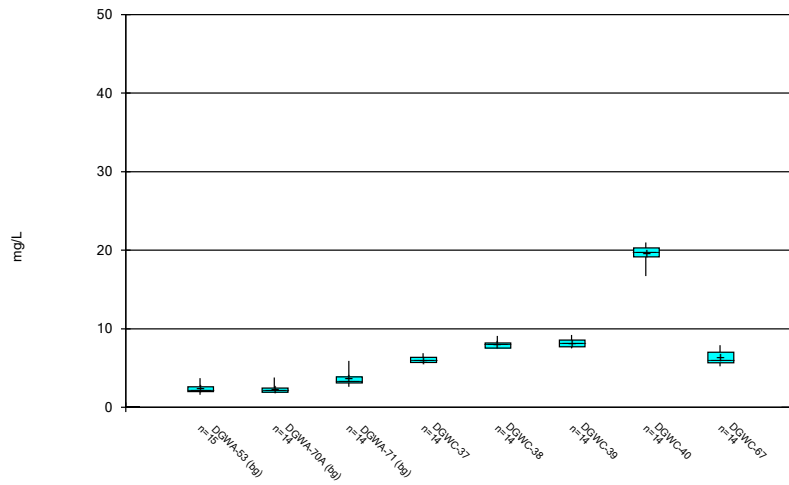
Constituent: Calcium, total Analysis Run 12/16/2021 2:13 PM View: AP 1
 Plant McDonough Client: Southern Company Data: McDonough AP

Box & Whiskers Plot



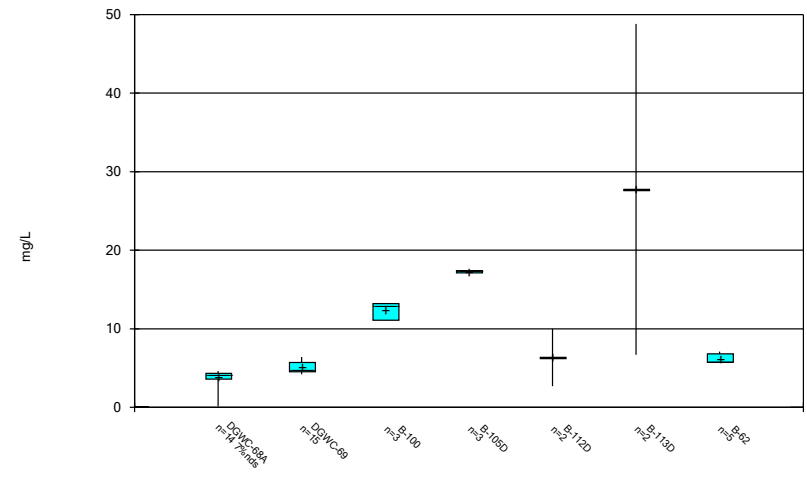
Constituent: Calcium, total Analysis Run 12/16/2021 2:14 PM View: AP 1
 Plant McDonough Client: Southern Company Data: McDonough AP

Box & Whiskers Plot



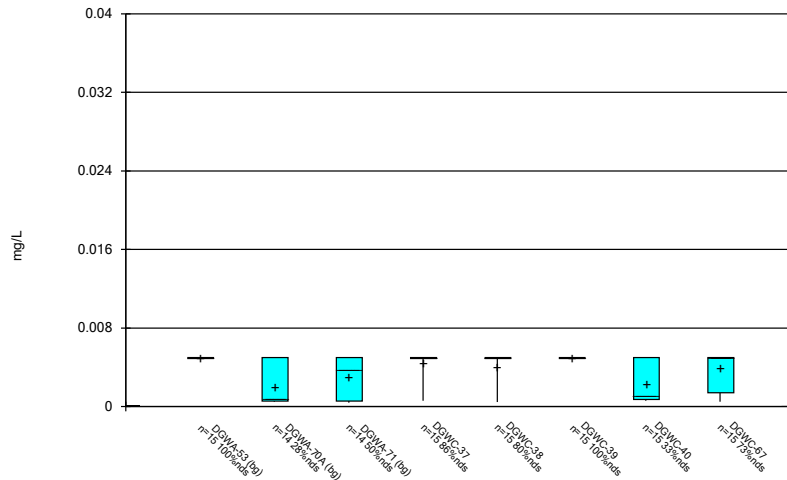
Constituent: Chloride, Total Analysis Run 12/16/2021 2:14 PM View: AP 1
 Plant McDonough Client: Southern Company Data: McDonough AP

Box & Whiskers Plot



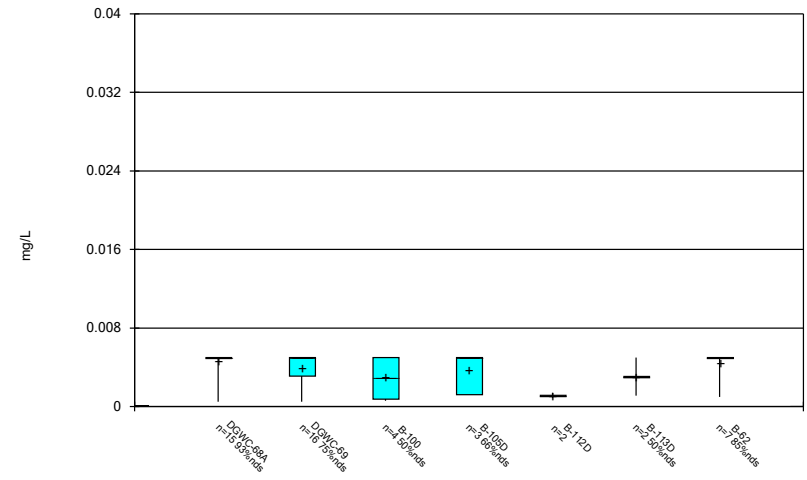
Constituent: Chloride, Total Analysis Run 12/16/2021 2:14 PM View: AP 1
 Plant McDonough Client: Southern Company Data: McDonough AP

Box & Whiskers Plot



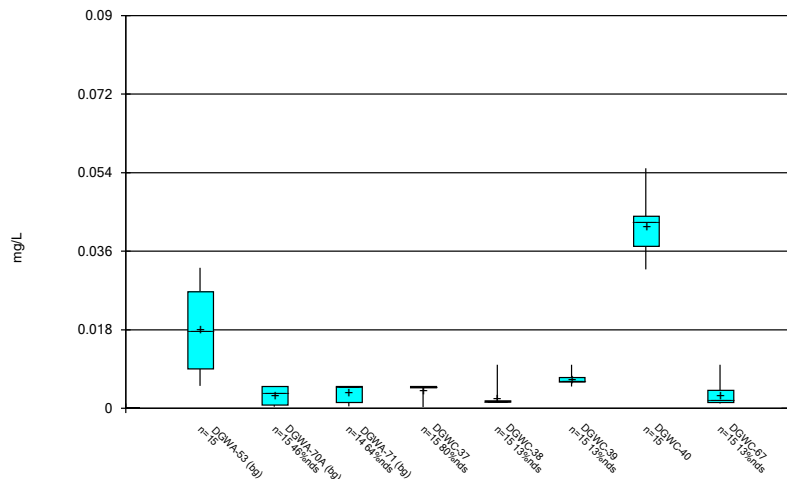
Constituent: Chromium Analysis Run 12/16/2021 2:14 PM View: AP 1
 Plant McDonough Client: Southern Company Data: McDonough AP

Box & Whiskers Plot



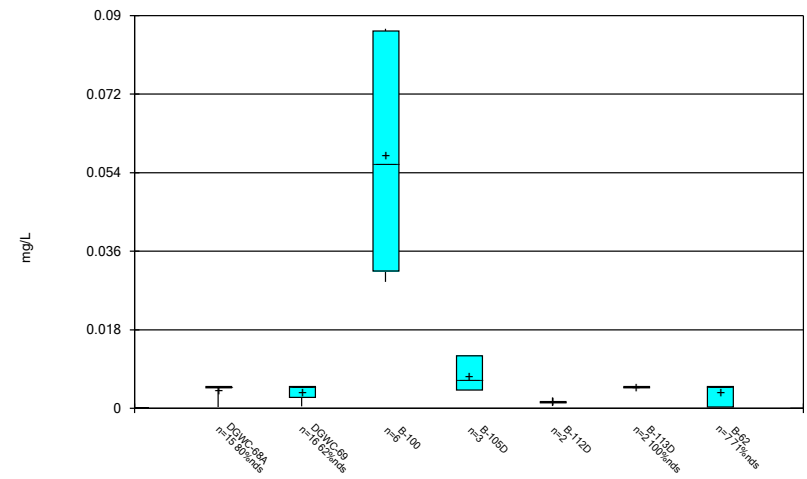
Constituent: Chromium Analysis Run 12/16/2021 2:14 PM View: AP 1
 Plant McDonough Client: Southern Company Data: McDonough AP

Box & Whiskers Plot



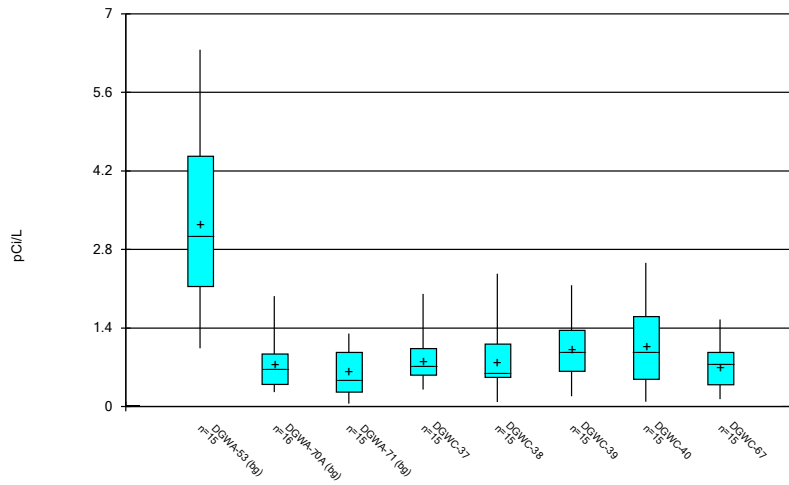
Constituent: Cobalt Analysis Run 12/16/2021 2:14 PM View: AP 1
 Plant McDonough Client: Southern Company Data: McDonough AP

Box & Whiskers Plot



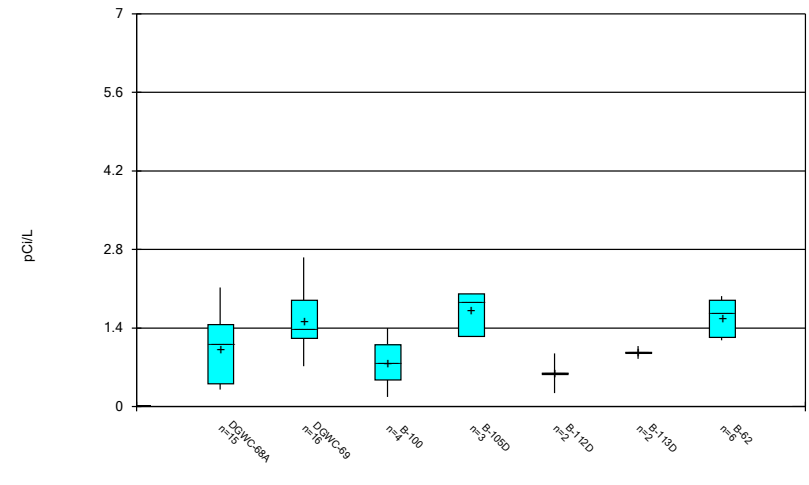
Constituent: Cobalt Analysis Run 12/16/2021 2:14 PM View: AP 1
 Plant McDonough Client: Southern Company Data: McDonough AP

Box & Whiskers Plot



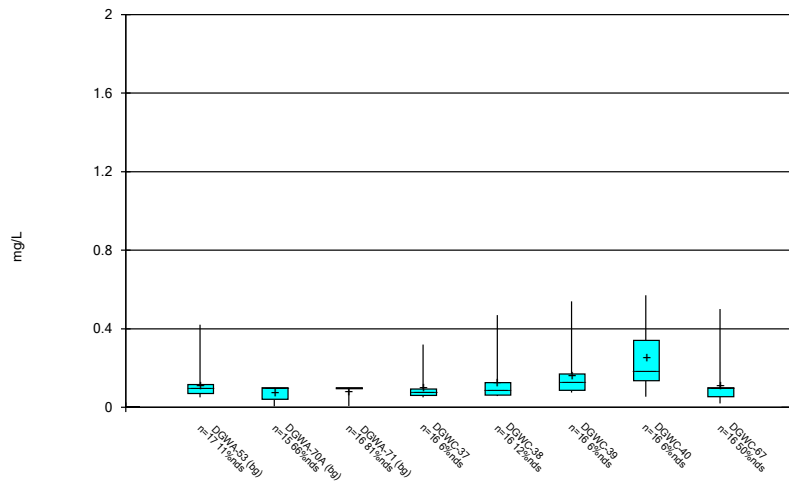
Constituent: Combined Radium 226 + 228 Analysis Run 12/16/2021 2:14 PM View: AP 1
 Plant McDonough Client: Southern Company Data: McDonough AP

Box & Whiskers Plot



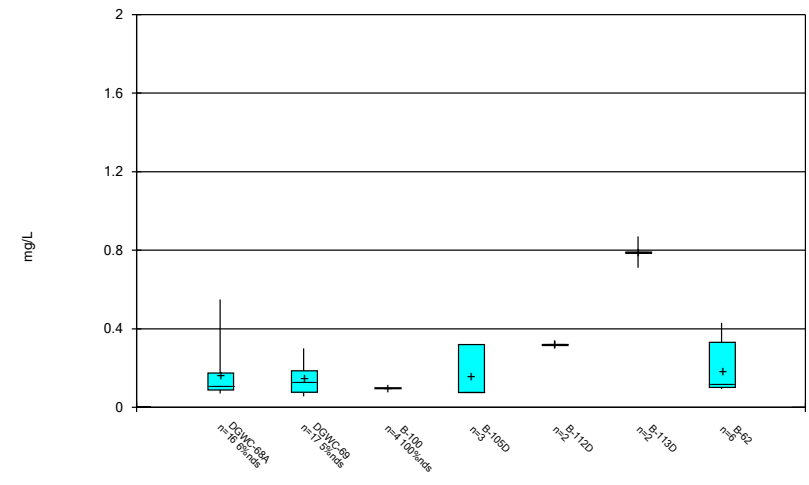
Constituent: Combined Radium 226 + 228 Analysis Run 12/16/2021 2:14 PM View: AP 1
 Plant McDonough Client: Southern Company Data: McDonough AP

Box & Whiskers Plot



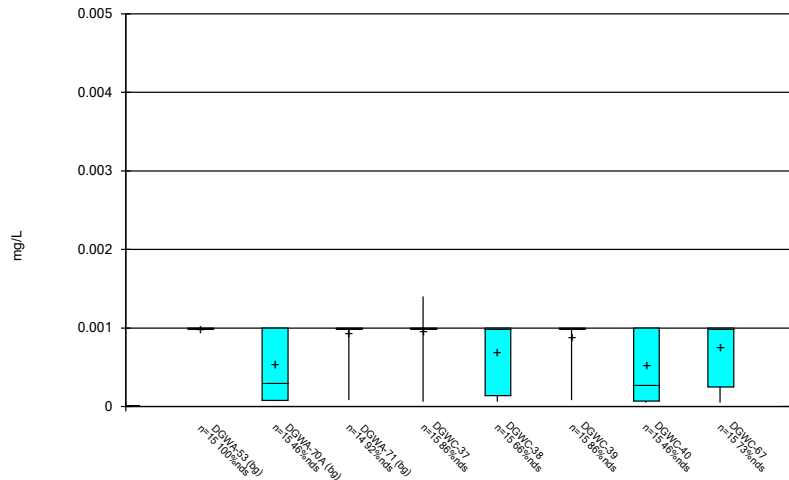
Constituent: Fluoride, total Analysis Run 12/16/2021 2:14 PM View: AP 1
 Plant McDonough Client: Southern Company Data: McDonough AP

Box & Whiskers Plot



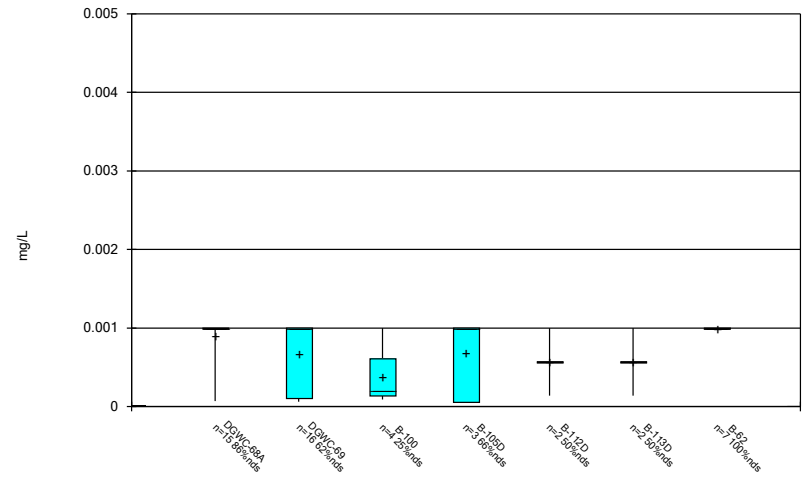
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 Plant McDonough Client: Southern Company Data: McDonough AP

Box & Whiskers Plot



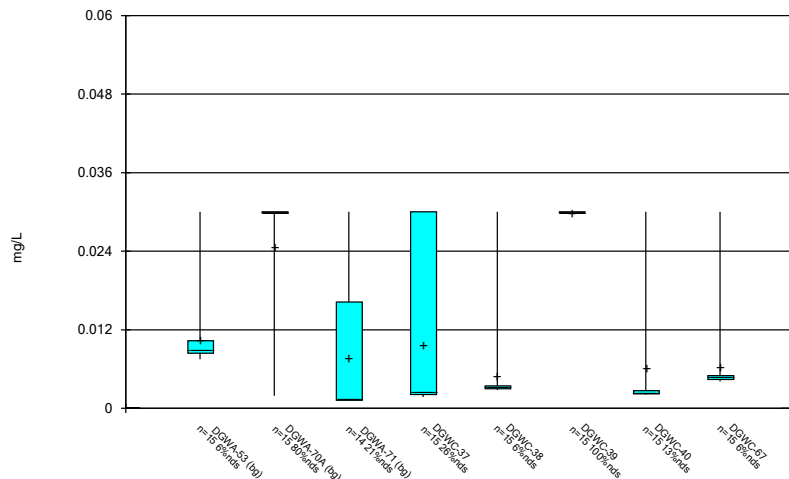
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 Plant McDonough Client: Southern Company Data: McDonough AP

Box & Whiskers Plot



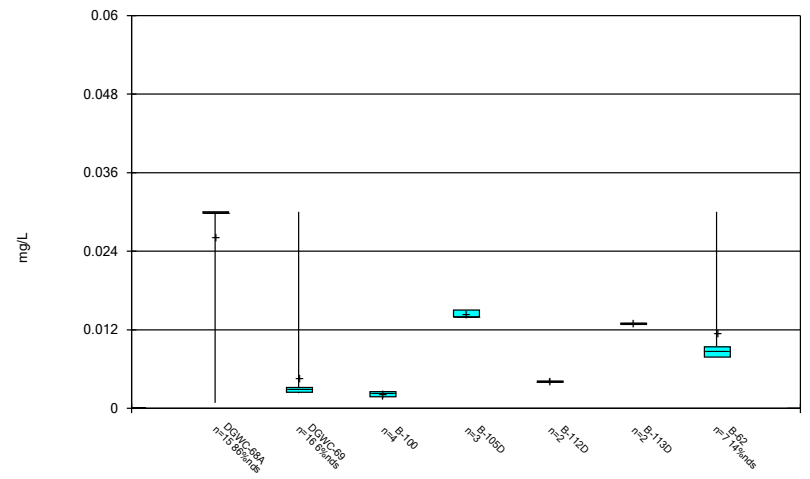
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 Plant McDonough Client: Southern Company Data: McDonough AP

Box & Whiskers Plot



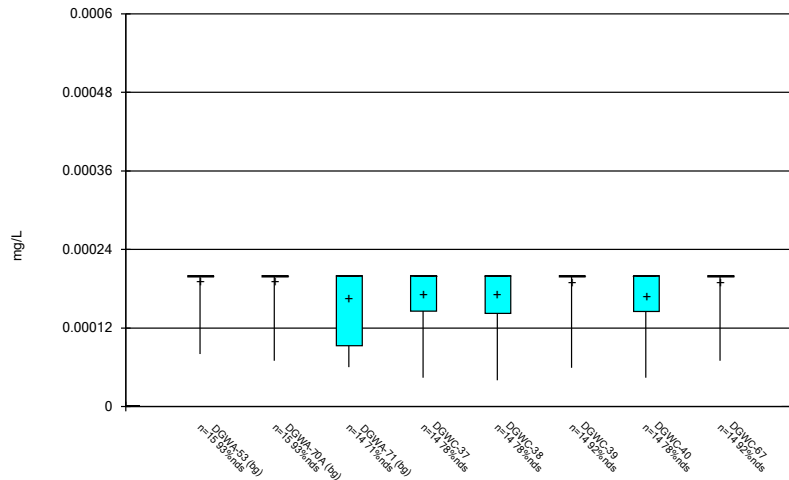
Constituent: Lithium Analysis Run 12/16/2021 2:14 PM View: AP 1
 Plant McDonough Client: Southern Company Data: McDonough AP

Box & Whiskers Plot



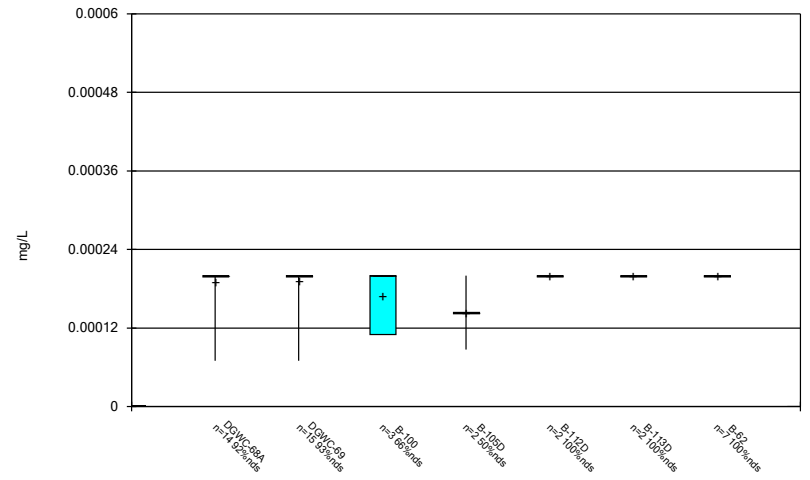
Constituent: Lithium Analysis Run 12/16/2021 2:14 PM View: AP 1
 Plant McDonough Client: Southern Company Data: McDonough AP

Box & Whiskers Plot



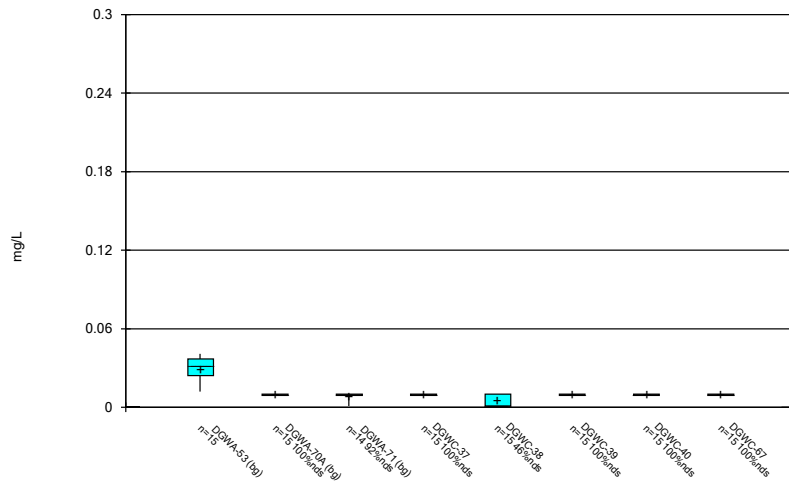
Constituent: Mercury Analysis Run 12/16/2021 2:14 PM View: AP 1
 Plant McDonough Client: Southern Company Data: McDonough AP

Box & Whiskers Plot



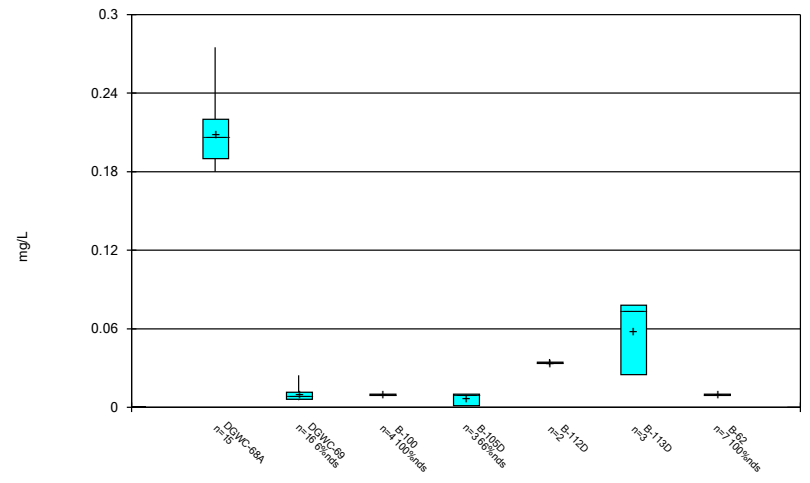
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 Plant McDonough Client: Southern Company Data: McDonough AP

Box & Whiskers Plot



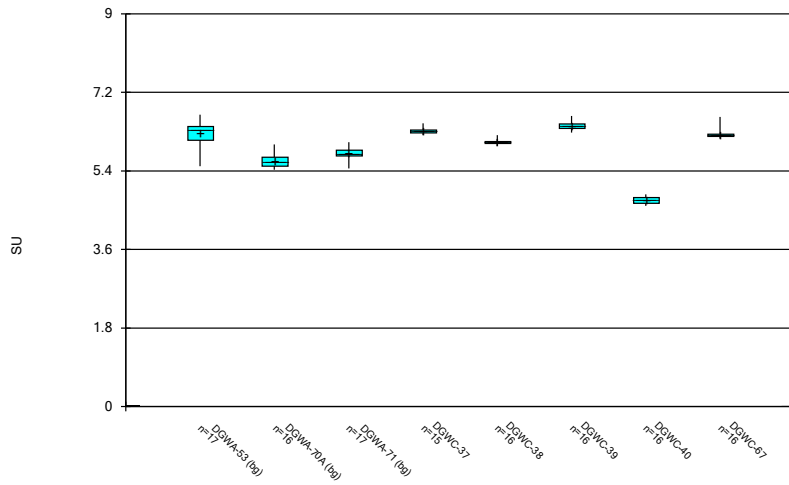
Constituent: Molybdenum Analysis Run 12/16/2021 2:14 PM View: AP 1
 Plant McDonough Client: Southern Company Data: McDonough AP

Box & Whiskers Plot



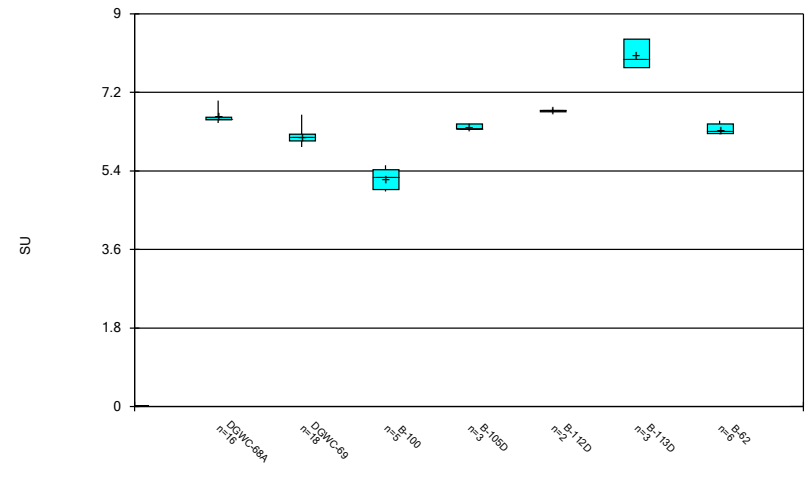
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 Plant McDonough Client: Southern Company Data: McDonough AP

Box & Whiskers Plot



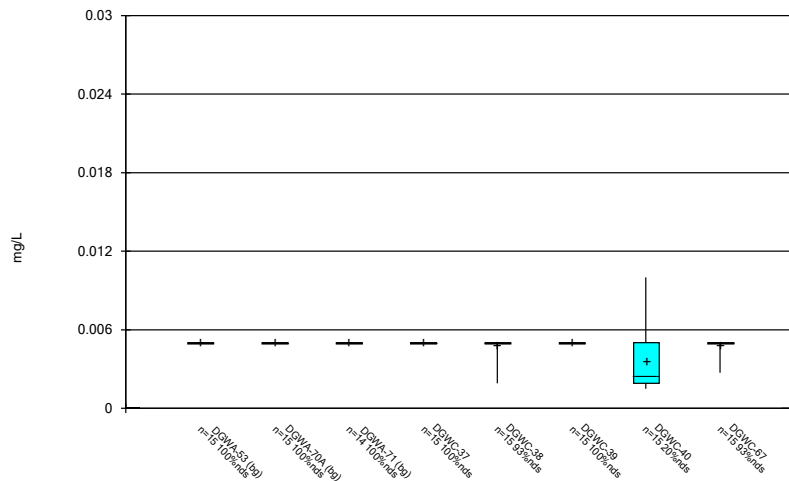
Constituent: pH, Field Analysis Run 12/16/2021 2:14 PM View: AP 1
 Plant McDonough Client: Southern Company Data: McDonough AP

Box & Whiskers Plot



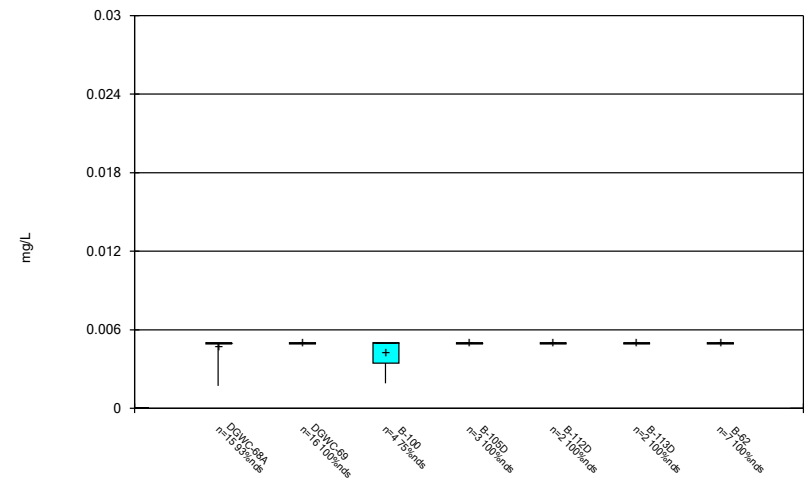
Constituent: pH, Field Analysis Run 12/16/2021 2:14 PM View: AP 1
 Plant McDonough Client: Southern Company Data: McDonough AP

Box & Whiskers Plot



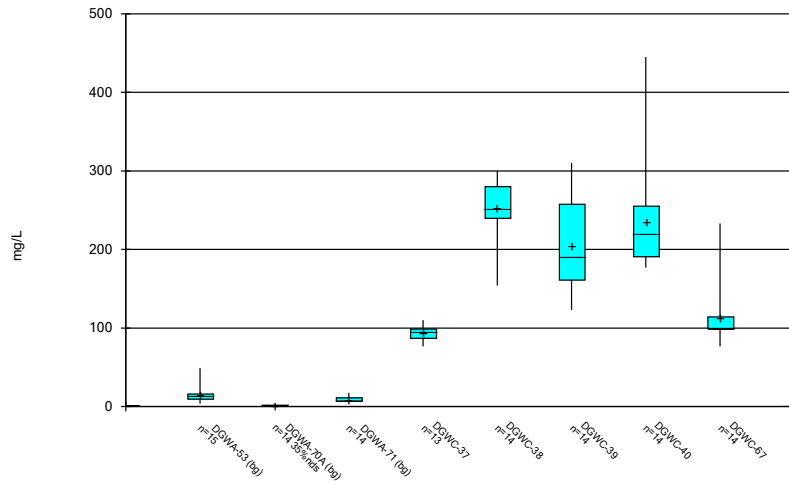
Constituent: Selenium Analysis Run 12/16/2021 2:14 PM View: AP 1
 Plant McDonough Client: Southern Company Data: McDonough AP

Box & Whiskers Plot



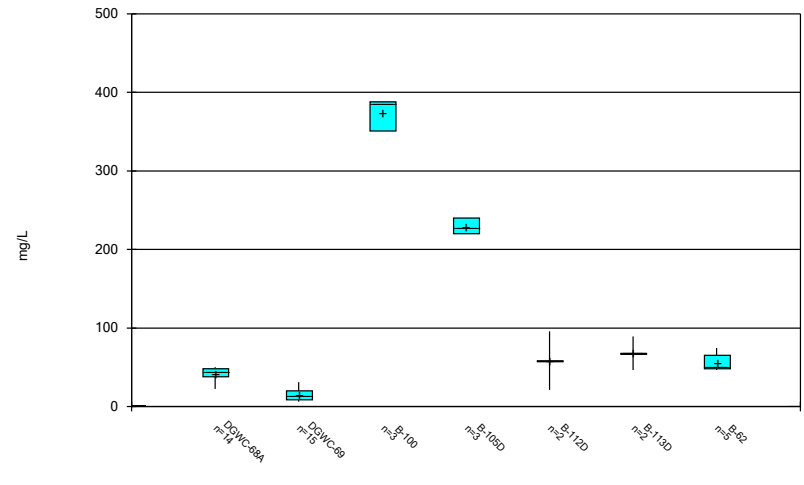
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 Plant McDonough Client: Southern Company Data: McDonough AP

Box & Whiskers Plot



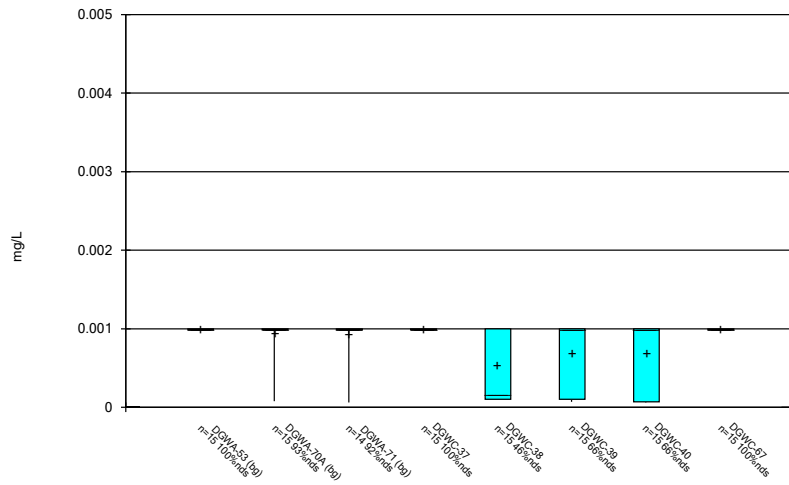
Constituent: Sulfate as SO4 Analysis Run 12/16/2021 2:14 PM View: AP 1
 Plant McDonough Client: Southern Company Data: McDonough AP

Box & Whiskers Plot



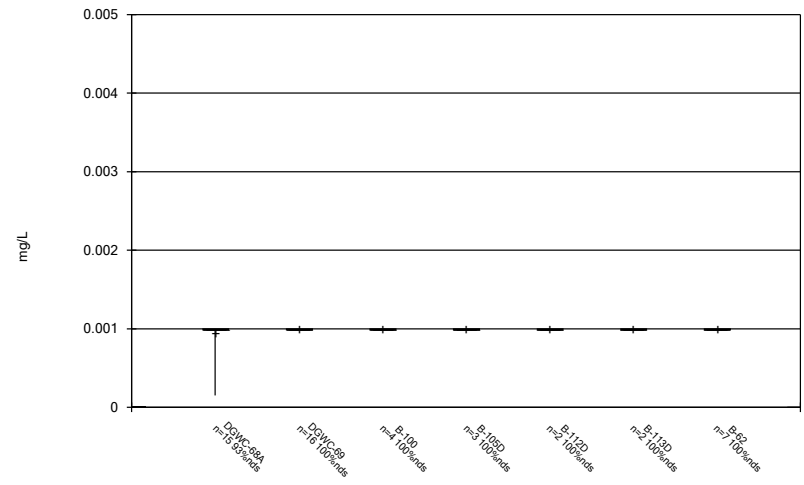
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 Plant McDonough Client: Southern Company Data: McDonough AP

Box & Whiskers Plot



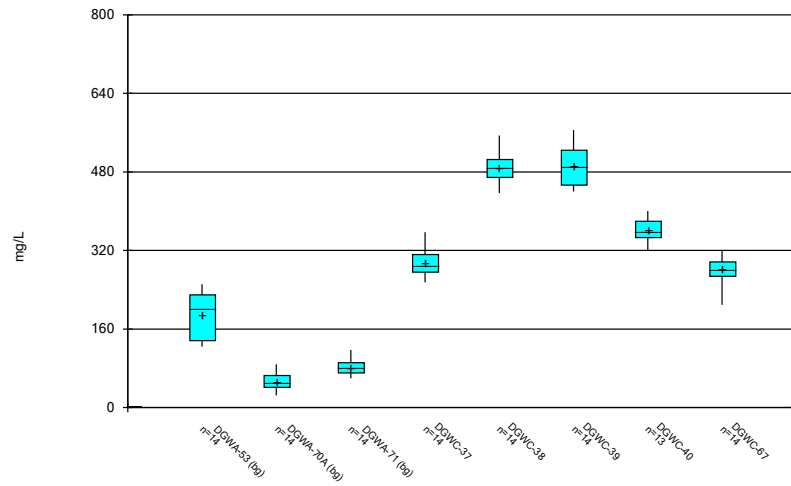
Constituent: Thallium Analysis Run 12/16/2021 2:14 PM View: AP 1
 Plant McDonough Client: Southern Company Data: McDonough AP

Box & Whiskers Plot



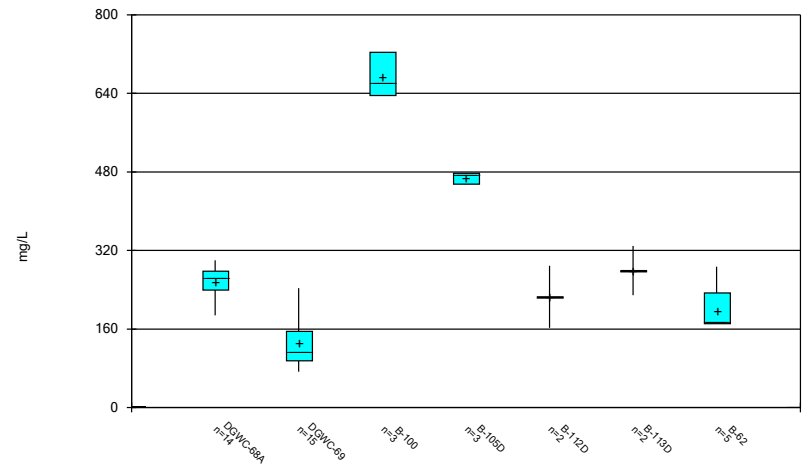
Constituent: Thallium Analysis Run 12/16/2021 2:14 PM View: AP 1
 Plant McDonough Client: Southern Company Data: McDonough AP

Box & Whiskers Plot



Constituent: Total Dissolved Solids [TDS] Analysis Run 12/16/2021 2:14 PM View: AP 1
 Plant McDonough Client: Southern Company Data: McDonough AP

Box & Whiskers Plot



Constituent: Total Dissolved Solids [TDS] Analysis Run 12/16/2021 2:14 PM View: AP 1
 Plant McDonough Client: Southern Company Data: McDonough AP

FIGURE C.

Outlier Summary

Plant McDonough Client: Southern Company Data: McDonough AP Printed 12/16/2021, 2:15 PM

Date	DGWC-68A Arsenic (mg/L)	DGWC-68A Barium (mg/L)	DGWA-70A Chromium (mg/L)	DGWC-68A Chromium (mg/L)	DGWC-68A Cobalt (mg/L)	DGWA-70A Fluoride, total (mg/L)	DGWC-68A pH, Field (SU)	DGWC-37 Sulfate as SO4 (mg/L)	DGWA-53 Total Dissolved Solids [TDS] (mg/L)	DGWC-40 Total Dissolved Solids [TDS] (mg/L)
9/2/2016									583 (O)	
3/28/2017					1.2 (O)					
7/13/2017								200 (O)		
10/24/2017									671 (O)	
10/15/2019			0.034 (O)							
9/16/2021	0.46 (o)	0.13 (o)		0.0014 (J,o)	0.0032 (J,o)	6.79 (o)				

FIGURE D.

Appendix III Interwell Prediction Limits - Significant Results

Plant McDonough Client: Southern Company Data: McDonough AP Printed 12/16/2021, 2:18 PM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Boron, total (mg/L)	DGWC-37	0.13	n/a	9/16/2021	1.4	Yes	41	n/a	n/a	26.83	n/a	n/a	0.001085	NP Inter (normality) 1 of 2
Boron, total (mg/L)	DGWC-38	0.13	n/a	9/15/2021	2.8	Yes	41	n/a	n/a	26.83	n/a	n/a	0.001085	NP Inter (normality) 1 of 2
Boron, total (mg/L)	DGWC-39	0.13	n/a	9/17/2021	2.8	Yes	41	n/a	n/a	26.83	n/a	n/a	0.001085	NP Inter (normality) 1 of 2
Boron, total (mg/L)	DGWC-40	0.13	n/a	9/14/2021	0.7	Yes	41	n/a	n/a	26.83	n/a	n/a	0.001085	NP Inter (normality) 1 of 2
Boron, total (mg/L)	DGWC-67	0.13	n/a	9/16/2021	3.4	Yes	41	n/a	n/a	26.83	n/a	n/a	0.001085	NP Inter (normality) 1 of 2
Boron, total (mg/L)	DGWC-68A	0.13	n/a	9/16/2021	1.3	Yes	41	n/a	n/a	26.83	n/a	n/a	0.001085	NP Inter (normality) 1 of 2
Boron, total (mg/L)	DGWC-69	0.13	n/a	9/16/2021	0.32	Yes	41	n/a	n/a	26.83	n/a	n/a	0.001085	NP Inter (normality) 1 of 2
Calcium, total (mg/L)	DGWC-37	40.3	n/a	9/16/2021	63	Yes	41	n/a	n/a	4.878	n/a	n/a	0.001085	NP Inter (normality) 1 of 2
Calcium, total (mg/L)	DGWC-38	40.3	n/a	9/15/2021	88.3	Yes	41	n/a	n/a	4.878	n/a	n/a	0.001085	NP Inter (normality) 1 of 2
Calcium, total (mg/L)	DGWC-39	40.3	n/a	9/17/2021	98.6	Yes	41	n/a	n/a	4.878	n/a	n/a	0.001085	NP Inter (normality) 1 of 2
Calcium, total (mg/L)	DGWC-40	40.3	n/a	9/14/2021	45.1	Yes	41	n/a	n/a	4.878	n/a	n/a	0.001085	NP Inter (normality) 1 of 2
Calcium, total (mg/L)	DGWC-67	40.3	n/a	9/16/2021	46	Yes	41	n/a	n/a	4.878	n/a	n/a	0.001085	NP Inter (normality) 1 of 2
Calcium, total (mg/L)	DGWC-68A	40.3	n/a	9/16/2021	60.6	Yes	41	n/a	n/a	4.878	n/a	n/a	0.001085	NP Inter (normality) 1 of 2
Chloride, Total (mg/L)	DGWC-37	4.677	n/a	9/16/2021	5.6	Yes	43	0.9633	0.2952	0	None	ln(x)	0.001075	Param Inter 1 of 2
Chloride, Total (mg/L)	DGWC-38	4.677	n/a	9/15/2021	7.6	Yes	43	0.9633	0.2952	0	None	ln(x)	0.001075	Param Inter 1 of 2
Chloride, Total (mg/L)	DGWC-39	4.677	n/a	9/17/2021	8.3	Yes	43	0.9633	0.2952	0	None	ln(x)	0.001075	Param Inter 1 of 2
Chloride, Total (mg/L)	DGWC-40	4.677	n/a	9/14/2021	16.7	Yes	43	0.9633	0.2952	0	None	ln(x)	0.001075	Param Inter 1 of 2
Chloride, Total (mg/L)	DGWC-67	4.677	n/a	9/16/2021	7.9	Yes	43	0.9633	0.2952	0	None	ln(x)	0.001075	Param Inter 1 of 2
Fluoride, total (mg/L)	DGWC-68A	0.42	n/a	9/16/2021	0.55	Yes	48	n/a	n/a	52.08	n/a	n/a	0.0008146	NP Inter (NDs) 1 of 2
pH, Field (SU)	DGWC-40	6.556	5.244	9/14/2021	4.67	Yes	50	5.9	0.3378	0	None	No	0.0005373	Param Inter 1 of 2
pH, Field (SU)	DGWC-68A	6.556	5.244	10/27/2021	6.56	Yes	50	5.9	0.3378	0	None	No	0.0005373	Param Inter 1 of 2
Sulfate as SO4 (mg/L)	DGWC-37	28.94	n/a	9/16/2021	95	Yes	43	2.563	1.435	11.63	None	sqrt(x)	0.001075	Param Inter 1 of 2
Sulfate as SO4 (mg/L)	DGWC-38	28.94	n/a	9/15/2021	219	Yes	43	2.563	1.435	11.63	None	sqrt(x)	0.001075	Param Inter 1 of 2
Sulfate as SO4 (mg/L)	DGWC-39	28.94	n/a	9/17/2021	156	Yes	43	2.563	1.435	11.63	None	sqrt(x)	0.001075	Param Inter 1 of 2
Sulfate as SO4 (mg/L)	DGWC-40	28.94	n/a	9/14/2021	186	Yes	43	2.563	1.435	11.63	None	sqrt(x)	0.001075	Param Inter 1 of 2
Sulfate as SO4 (mg/L)	DGWC-67	28.94	n/a	9/16/2021	101	Yes	43	2.563	1.435	11.63	None	sqrt(x)	0.001075	Param Inter 1 of 2
Total Dissolved Solids [TDS] (mg/L)	DGWC-37	265.7	n/a	9/16/2021	278	Yes	42	4.572	0.9447	0	None	x^(1/3)	0.001075	Param Inter 1 of 2
Total Dissolved Solids [TDS] (mg/L)	DGWC-38	265.7	n/a	9/15/2021	474	Yes	42	4.572	0.9447	0	None	x^(1/3)	0.001075	Param Inter 1 of 2
Total Dissolved Solids [TDS] (mg/L)	DGWC-39	265.7	n/a	9/17/2021	446	Yes	42	4.572	0.9447	0	None	x^(1/3)	0.001075	Param Inter 1 of 2
Total Dissolved Solids [TDS] (mg/L)	DGWC-40	265.7	n/a	9/14/2021	347	Yes	42	4.572	0.9447	0	None	x^(1/3)	0.001075	Param Inter 1 of 2
Total Dissolved Solids [TDS] (mg/L)	DGWC-67	265.7	n/a	9/16/2021	282	Yes	42	4.572	0.9447	0	None	x^(1/3)	0.001075	Param Inter 1 of 2

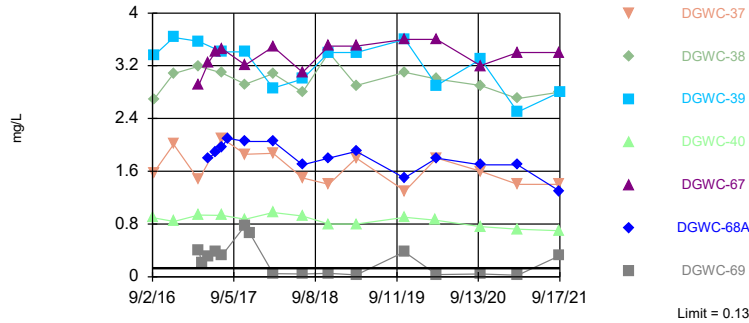
Appendix III Interwell Prediction Limits - All Results

Plant McDonough Client: Southern Company Data: McDonough AP Printed 12/16/2021, 2:18 PM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Boron, total (mg/L)	DGWC-37	0.13	n/a	9/16/2021	1.4	Yes	41	n/a	n/a	26.83	n/a	n/a	0.001085	NP Inter (normality) 1 of 2
Boron, total (mg/L)	DGWC-38	0.13	n/a	9/15/2021	2.8	Yes	41	n/a	n/a	26.83	n/a	n/a	0.001085	NP Inter (normality) 1 of 2
Boron, total (mg/L)	DGWC-39	0.13	n/a	9/17/2021	2.8	Yes	41	n/a	n/a	26.83	n/a	n/a	0.001085	NP Inter (normality) 1 of 2
Boron, total (mg/L)	DGWC-40	0.13	n/a	9/14/2021	0.7	Yes	41	n/a	n/a	26.83	n/a	n/a	0.001085	NP Inter (normality) 1 of 2
Boron, total (mg/L)	DGWC-67	0.13	n/a	9/16/2021	3.4	Yes	41	n/a	n/a	26.83	n/a	n/a	0.001085	NP Inter (normality) 1 of 2
Boron, total (mg/L)	DGWC-68A	0.13	n/a	9/16/2021	1.3	Yes	41	n/a	n/a	26.83	n/a	n/a	0.001085	NP Inter (normality) 1 of 2
Boron, total (mg/L)	DGWC-69	0.13	n/a	9/16/2021	0.32	Yes	41	n/a	n/a	26.83	n/a	n/a	0.001085	NP Inter (normality) 1 of 2
Calcium, total (mg/L)	DGWC-37	40.3	n/a	9/16/2021	63	Yes	41	n/a	n/a	4.878	n/a	n/a	0.001085	NP Inter (normality) 1 of 2
Calcium, total (mg/L)	DGWC-38	40.3	n/a	9/15/2021	88.3	Yes	41	n/a	n/a	4.878	n/a	n/a	0.001085	NP Inter (normality) 1 of 2
Calcium, total (mg/L)	DGWC-39	40.3	n/a	9/17/2021	98.6	Yes	41	n/a	n/a	4.878	n/a	n/a	0.001085	NP Inter (normality) 1 of 2
Calcium, total (mg/L)	DGWC-40	40.3	n/a	9/14/2021	45.1	Yes	41	n/a	n/a	4.878	n/a	n/a	0.001085	NP Inter (normality) 1 of 2
Calcium, total (mg/L)	DGWC-67	40.3	n/a	9/16/2021	46	Yes	41	n/a	n/a	4.878	n/a	n/a	0.001085	NP Inter (normality) 1 of 2
Calcium, total (mg/L)	DGWC-68A	40.3	n/a	9/16/2021	60.6	Yes	41	n/a	n/a	4.878	n/a	n/a	0.001085	NP Inter (normality) 1 of 2
Calcium, total (mg/L)	DGWC-69	40.3	n/a	9/16/2021	18	No	41	n/a	n/a	4.878	n/a	n/a	0.001085	NP Inter (normality) 1 of 2
Chloride, Total (mg/L)	DGWC-37	4.677	n/a	9/16/2021	5.6	Yes	43	0.9633	0.2952	0	None	ln(x)	0.001075	Param Inter 1 of 2
Chloride, Total (mg/L)	DGWC-38	4.677	n/a	9/15/2021	7.6	Yes	43	0.9633	0.2952	0	None	ln(x)	0.001075	Param Inter 1 of 2
Chloride, Total (mg/L)	DGWC-39	4.677	n/a	9/17/2021	8.3	Yes	43	0.9633	0.2952	0	None	ln(x)	0.001075	Param Inter 1 of 2
Chloride, Total (mg/L)	DGWC-40	4.677	n/a	9/14/2021	16.7	Yes	43	0.9633	0.2952	0	None	ln(x)	0.001075	Param Inter 1 of 2
Chloride, Total (mg/L)	DGWC-67	4.677	n/a	9/16/2021	7.9	Yes	43	0.9633	0.2952	0	None	ln(x)	0.001075	Param Inter 1 of 2
Chloride, Total (mg/L)	DGWC-68A	4.677	n/a	9/16/2021	3.4	No	43	0.9633	0.2952	0	None	ln(x)	0.001075	Param Inter 1 of 2
Chloride, Total (mg/L)	DGWC-69	4.677	n/a	9/16/2021	4.5	No	43	0.9633	0.2952	0	None	ln(x)	0.001075	Param Inter 1 of 2
Fluoride, total (mg/L)	DGWC-37	0.42	n/a	9/16/2021	0.084J	No	48	n/a	n/a	52.08	n/a	n/a	0.0008146	NP Inter (NDs) 1 of 2
Fluoride, total (mg/L)	DGWC-38	0.42	n/a	9/15/2021	0.06J	No	48	n/a	n/a	52.08	n/a	n/a	0.0008146	NP Inter (NDs) 1 of 2
Fluoride, total (mg/L)	DGWC-39	0.42	n/a	9/17/2021	0.13	No	48	n/a	n/a	52.08	n/a	n/a	0.0008146	NP Inter (NDs) 1 of 2
Fluoride, total (mg/L)	DGWC-40	0.42	n/a	9/14/2021	0.13	No	48	n/a	n/a	52.08	n/a	n/a	0.0008146	NP Inter (NDs) 1 of 2
Fluoride, total (mg/L)	DGWC-67	0.42	n/a	9/16/2021	0.069J	No	48	n/a	n/a	52.08	n/a	n/a	0.0008146	NP Inter (NDs) 1 of 2
Fluoride, total (mg/L)	DGWC-68A	0.42	n/a	9/16/2021	0.55	Yes	48	n/a	n/a	52.08	n/a	n/a	0.0008146	NP Inter (NDs) 1 of 2
Fluoride, total (mg/L)	DGWC-69	0.42	n/a	9/16/2021	0.11	No	48	n/a	n/a	52.08	n/a	n/a	0.0008146	NP Inter (NDs) 1 of 2
pH, Field (SU)	DGWC-37	6.556	5.244	9/16/2021	6.33	No	50	5.9	0.3378	0	None	No	0.0005373	Param Inter 1 of 2
pH, Field (SU)	DGWC-38	6.556	5.244	9/15/2021	6.08	No	50	5.9	0.3378	0	None	No	0.0005373	Param Inter 1 of 2
pH, Field (SU)	DGWC-39	6.556	5.244	9/17/2021	6.49	No	50	5.9	0.3378	0	None	No	0.0005373	Param Inter 1 of 2
pH, Field (SU)	DGWC-40	6.556	5.244	9/14/2021	4.67	Yes	50	5.9	0.3378	0	None	No	0.0005373	Param Inter 1 of 2
pH, Field (SU)	DGWC-67	6.556	5.244	9/16/2021	6.2	No	50	5.9	0.3378	0	None	No	0.0005373	Param Inter 1 of 2
pH, Field (SU)	DGWC-68A	6.556	5.244	10/27/2021	6.56	Yes	50	5.9	0.3378	0	None	No	0.0005373	Param Inter 1 of 2
pH, Field (SU)	DGWC-69	6.556	5.244	9/16/2021	6.16	No	50	5.9	0.3378	0	None	No	0.0005373	Param Inter 1 of 2
Sulfate as SO4 (mg/L)	DGWC-37	28.94	n/a	9/16/2021	95	Yes	43	2.563	1.435	11.63	None	sqrt(x)	0.001075	Param Inter 1 of 2
Sulfate as SO4 (mg/L)	DGWC-38	28.94	n/a	9/15/2021	219	Yes	43	2.563	1.435	11.63	None	sqrt(x)	0.001075	Param Inter 1 of 2
Sulfate as SO4 (mg/L)	DGWC-39	28.94	n/a	9/17/2021	156	Yes	43	2.563	1.435	11.63	None	sqrt(x)	0.001075	Param Inter 1 of 2
Sulfate as SO4 (mg/L)	DGWC-40	28.94	n/a	9/14/2021	186	Yes	43	2.563	1.435	11.63	None	sqrt(x)	0.001075	Param Inter 1 of 2
Sulfate as SO4 (mg/L)	DGWC-67	28.94	n/a	9/16/2021	101	Yes	43	2.563	1.435	11.63	None	sqrt(x)	0.001075	Param Inter 1 of 2
Sulfate as SO4 (mg/L)	DGWC-68A	28.94	n/a	9/16/2021	22.3	No	43	2.563	1.435	11.63	None	sqrt(x)	0.001075	Param Inter 1 of 2
Sulfate as SO4 (mg/L)	DGWC-69	28.94	n/a	9/16/2021	17.9	No	43	2.563	1.435	11.63	None	sqrt(x)	0.001075	Param Inter 1 of 2
Total Dissolved Solids [TDS] (mg/L)	DGWC-37	265.7	n/a	9/16/2021	278	Yes	42	4.572	0.9447	0	None	x^(1/3)	0.001075	Param Inter 1 of 2
Total Dissolved Solids [TDS] (mg/L)	DGWC-38	265.7	n/a	9/15/2021	474	Yes	42	4.572	0.9447	0	None	x^(1/3)	0.001075	Param Inter 1 of 2
Total Dissolved Solids [TDS] (mg/L)	DGWC-39	265.7	n/a	9/17/2021	446	Yes	42	4.572	0.9447	0	None	x^(1/3)	0.001075	Param Inter 1 of 2
Total Dissolved Solids [TDS] (mg/L)	DGWC-40	265.7	n/a	9/14/2021	347	Yes	42	4.572	0.9447	0	None	x^(1/3)	0.001075	Param Inter 1 of 2
Total Dissolved Solids [TDS] (mg/L)	DGWC-67	265.7	n/a	9/16/2021	282	Yes	42	4.572	0.9447	0	None	x^(1/3)	0.001075	Param Inter 1 of 2
Total Dissolved Solids [TDS] (mg/L)	DGWC-68A	265.7	n/a	9/16/2021	259	No	42	4.572	0.9447	0	None	x^(1/3)	0.001075	Param Inter 1 of 2
Total Dissolved Solids [TDS] (mg/L)	DGWC-69	265.7	n/a	9/16/2021	113	No	42	4.572	0.9447	0	None	x^(1/3)	0.001075	Param Inter 1 of 2

Exceeds Limit: DGWC-37, DGWC-38, DGWC-39, DGWC-40, DGWC-67, DGWC-68A, DGWC-69

Prediction Limit
Interwell Non-parametric

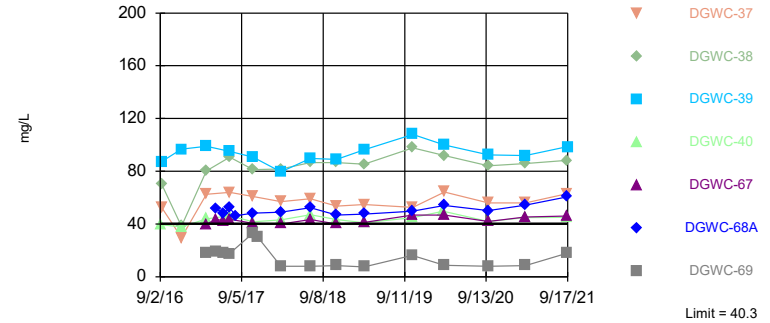


Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 41 background values. 26.83% NDs. Annual per-constituent alpha = 0.01508. Individual comparison alpha = 0.001085 (1 of 2). Comparing 7 points to limit.

Constituent: Boron, total Analysis Run 12/16/2021 2:15 PM View: AP 1 Appendix III
Plant McDonough Client: Southern Company Data: McDonough AP

Exceeds Limit: DGWC-37, DGWC-38, DGWC-39, DGWC-40, DGWC-67, DGWC-68A

Prediction Limit
Interwell Non-parametric

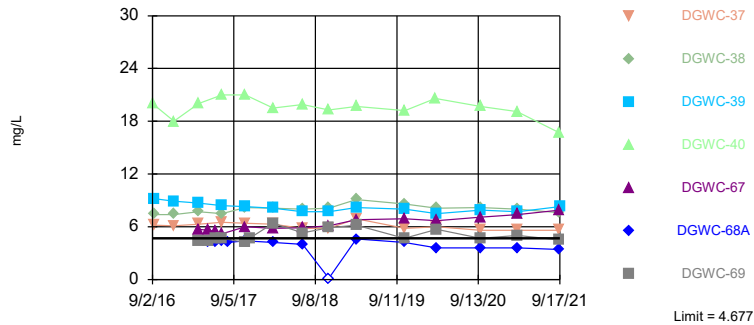


Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 41 background values. 4.878% NDs. Annual per-constituent alpha = 0.01508. Individual comparison alpha = 0.001085 (1 of 2). Comparing 7 points to limit.

Constituent: Calcium, total Analysis Run 12/16/2021 2:16 PM View: AP 1 Appendix III
Plant McDonough Client: Southern Company Data: McDonough AP

Exceeds Limit: DGWC-37, DGWC-38, DGWC-39, DGWC-40, DGWC-67

Prediction Limit
Interwell Parametric

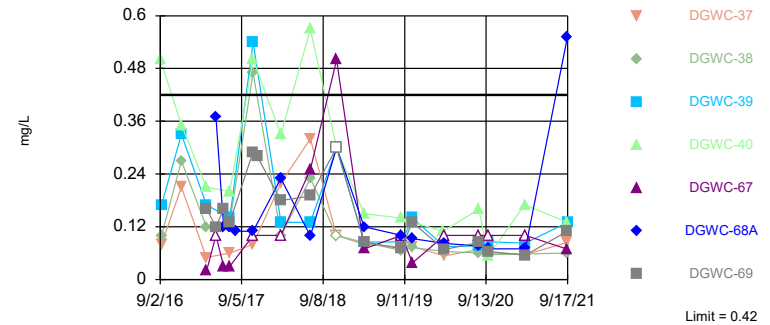


Background Data Summary (based on natural log transformation): Mean=0.9633, Std. Dev.=0.2952, n=43. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9421, critical = 0.923. Kappa = 1.962 (c=7, w=7, 1 of 2, event alpha = 0.05132). Report alpha = 0.007498. Individual comparison alpha = 0.001075. Comparing 7 points to limit.

Constituent: Chloride, Total Analysis Run 12/16/2021 2:16 PM View: AP 1 Appendix III
Plant McDonough Client: Southern Company Data: McDonough AP

Exceeds Limit: DGWC-68A

Prediction Limit
Interwell Non-parametric

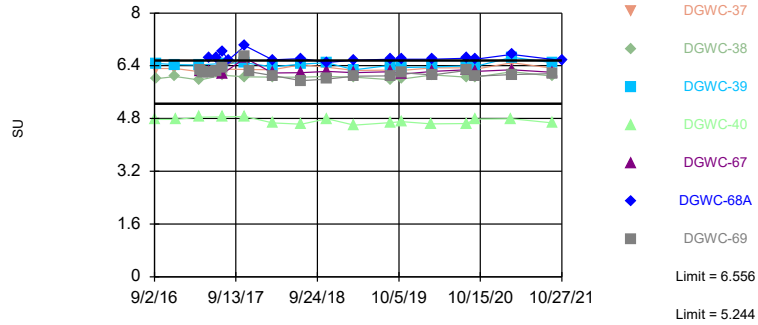


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 48 background values. 52.08% NDs. Annual per-constituent alpha = 0.01134. Individual comparison alpha = 0.0008146 (1 of 2). Comparing 7 points to limit.

Constituent: Fluoride, total Analysis Run 12/16/2021 2:16 PM View: AP 1 Appendix III
Plant McDonough Client: Southern Company Data: McDonough AP

Exceeds Limits: DGWC-40, DGWC-68A

Prediction Limit
Interwell Parametric

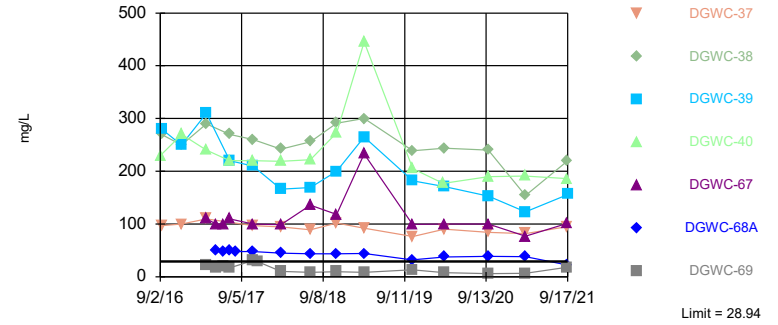


Background Data Summary: Mean=5.9, Std. Dev.=0.3378, n=50. Normality test: Shapiro Francia @alpha = 0.01, calculated = 0.9448, critical = 0.935. Kappa = 1.942 (c=7, w=7, 1 of 2, event alpha = 0.05132). Report alpha = 0.007498. Individual comparison alpha = 0.0005373. Comparing 7 points to limit.

Constituent: pH, Field Analysis Run 12/16/2021 2:16 PM View: AP 1 Appendix III
Plant McDonough Client: Southern Company Data: McDonough AP

Exceeds Limit: DGWC-37, DGWC-38, DGWC-39, DGWC-40, DGWC-67

Prediction Limit
Interwell Parametric

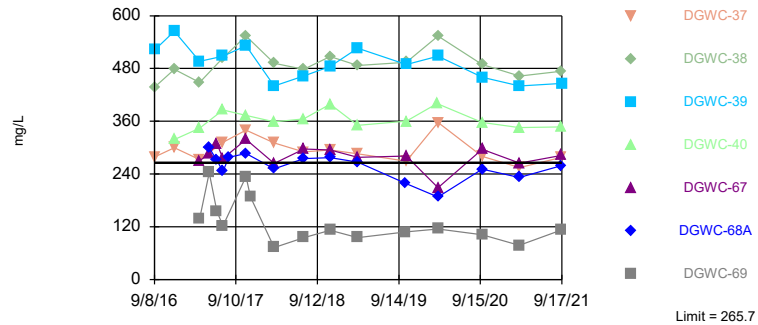


Background Data Summary (based on square root transformation): Mean=2.563, Std. Dev.=1.435, n=43, 11.63% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9331, critical = 0.923. Kappa = 1.962 (c=7, w=7, 1 of 2, event alpha = 0.05132). Report alpha = 0.007498. Individual comparison alpha = 0.001075. Comparing 7 points to limit.

Constituent: Sulfate as SO4 Analysis Run 12/16/2021 2:16 PM View: AP 1 Appendix III
Plant McDonough Client: Southern Company Data: McDonough AP

Exceeds Limit: DGWC-37, DGWC-38, DGWC-39, DGWC-40, DGWC-67

Prediction Limit
Interwell Parametric



Background Data Summary (based on cube root transformation): Mean=4.572, Std. Dev.=0.9447, n=42. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.933, critical = 0.922. Kappa = 1.966 (c=7, w=7, 1 of 2, event alpha = 0.05132). Report alpha = 0.007498. Individual comparison alpha = 0.001075. Comparing 7 points to limit.

Constituent: Total Dissolved Solids [TDS] Analysis Run 12/16/2021 2:16 PM View: AP 1 Appendix III
Plant McDonough Client: Southern Company Data: McDonough AP

Prediction Limit

Constituent: Boron, total (mg/L) Analysis Run 12/16/2021 2:18 PM View: AP 1 Appendix III

Plant McDonough Client: Southern Company Data: McDonough AP

	DGWC-40	DGWC-39	DGWC-38	DGWC-37	DGWA-71 (bg)	DGWA-70A (bg)	DGWA-53 (bg)	DGWC-69	DGWC-67
9/2/2016	0.895								
9/8/2016		3.35	2.69	1.58					
12/7/2016		3.63	3.08	2.01					
12/8/2016	0.841								
3/28/2017					0.0097 (J)	0.0067 (J)	0.0612		
3/30/2017	0.937	3.57	3.19	1.47					
3/31/2017								0.407	2.91
4/12/2017								0.207	
5/11/2017							0.0805		
5/12/2017					0.0082 (J)			0.311	3.24
5/15/2017						0.0073 (J)			
6/15/2017						<0.04	0.0725		
6/16/2017					0.0085 (J)			0.381	3.42
7/11/2017					0.0077 (J)	<0.04			
7/12/2017							0.0735		
7/13/2017	0.933	3.41	3.09	2.1				0.323	3.46
8/8/2017						<0.04			
10/24/2017					0.0083 (J)	0.0082 (J)	0.077		
10/26/2017	0.873	3.41	2.92	1.86				0.779	3.21
11/15/2017								0.667	
2/27/2018					0.0069 (J)	0.0062 (J)			
3/1/2018		2.86	3.08	1.87					
3/2/2018	0.974							0.0478	3.49
3/8/2018							0.13 (J)		
7/12/2018	0.92	3	2.8	1.5			0.076		
7/13/2018								0.043	3.1
11/6/2018					<0.04 (J)	<0.04 (J)			
11/7/2018							0.073		
11/8/2018	0.8	3.4	3.4	1.4				0.054	3.5
3/12/2019					0.0068 (J)	0.0073 (J)			
3/13/2019	0.8	3.4	2.9	1.8			0.08	0.028 (J)	3.5
10/15/2019					0.0054 (J)	<0.04			
10/16/2019							0.059	0.38	
10/17/2019									3.6
10/18/2019	0.9	3.6	3.1	1.3					
3/2/2020					0.01 (J)	0.0055 (J)			
3/4/2020	0.86								
3/9/2020		2.9	3	1.8			0.08 (J)	0.035 (J)	3.6
9/22/2020					<0.04	<0.04	0.056 (J)		
9/23/2020	0.76							0.041 (J)	3.2
9/24/2020			2.9	1.6					
9/25/2020		3.3							
3/1/2021					0.0054 (J)	<0.04			
3/8/2021	0.72								
3/10/2021								0.024 (J)	
3/11/2021		2.5	2.7	1.4					3.4
3/12/2021							0.064		
9/8/2021					<0.04				
9/9/2021						<0.04	0.065		
9/14/2021	0.7								
9/15/2021			2.8						
9/16/2021				1.4				0.32	3.4

Prediction Limit

Constituent: Boron, total (mg/L) Analysis Run 12/16/2021 2:18 PM View: AP 1 Appendix III
Plant McDonough Client: Southern Company Data: McDonough AP

9/17/2021	DGWC-40	DGWC-39 2.8	DGWC-38	DGWC-37	DGWA-71 (bg)	DGWA-70A (bg)	DGWA-53 (bg)	DGWC-69	DGWC-67
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Prediction Limit

Constituent: Boron, total (mg/L) Analysis Run 12/16/2021 2:18 PM View: AP 1 Appendix III
Plant McDonough Client: Southern Company Data: McDonough AP

DGWC-68A

9/2/2016	
9/8/2016	
12/7/2016	
12/8/2016	
3/28/2017	
3/30/2017	
3/31/2017	
4/12/2017	
5/11/2017	
5/12/2017	1.8
5/15/2017	
6/15/2017	
6/16/2017	1.88
7/11/2017	
7/12/2017	
7/13/2017	1.97
8/8/2017	2.1
10/24/2017	
10/26/2017	2.05
11/15/2017	
2/27/2018	
3/1/2018	
3/2/2018	2.05
3/8/2018	
7/12/2018	
7/13/2018	1.7
11/6/2018	
11/7/2018	
11/8/2018	1.8
3/12/2019	
3/13/2019	1.9
10/15/2019	
10/16/2019	1.5
10/17/2019	
10/18/2019	
3/2/2020	
3/4/2020	
3/9/2020	1.8
9/22/2020	
9/23/2020	1.7
9/24/2020	
9/25/2020	
3/1/2021	
3/8/2021	
3/10/2021	1.7
3/11/2021	
3/12/2021	
9/8/2021	
9/9/2021	
9/14/2021	
9/15/2021	
9/16/2021	1.3

Prediction Limit

Constituent: Boron, total (mg/L) Analysis Run 12/16/2021 2:18 PM View: AP 1 Appendix III
Plant McDonough Client: Southern Company Data: McDonough AP

DGWC-68A

9/17/2021

Prediction Limit

Constituent: Calcium, total (mg/L) Analysis Run 12/16/2021 2:18 PM View: AP 1 Appendix III

Plant McDonough Client: Southern Company Data: McDonough AP

	DGWC-40	DGWC-39	DGWC-38	DGWC-37	DGWA-71 (bg)	DGWA-70A (bg)	DGWA-53 (bg)	DGWC-69	DGWC-67
9/2/2016	39.6								
9/8/2016		87.2	70.3	52.5					
12/7/2016		96.7	38.4	29.7					
12/8/2016	37.9								
3/28/2017					8.31	5.14	30.8		
3/30/2017	43.9	98.9	80.3	62.6					
3/31/2017								18.6 (J)	39.9
5/11/2017							35.8		
5/12/2017					8.04			18.9 (J)	43.6
5/15/2017						6.5			
6/15/2017						5.38	36		
6/16/2017					7.66			17.7	42.5
7/11/2017					7.71	5.96			
7/12/2017							40.3		
7/13/2017	46.2	95	90.8	64.1				17.6	43.7
8/8/2017						5.2			
10/24/2017					6.86	4.93	30.3		
10/26/2017	41.8	90.6	81.3	60.8				33.3	40.4
11/15/2017								30.6	
2/27/2018					<25	<25			
3/1/2018		79.6	81.8	57					
3/2/2018	43.2							8.09	40.1
3/8/2018							39.8		
7/12/2018	47.1	89.8	86.7	59.1			34.7		
7/13/2018								7.9	43.3
11/6/2018					5.7	5.5			
11/7/2018							28.6		
11/8/2018	43.5	89	86.6	53.6				8.5	40.1
3/12/2019					5.5	5.1			
3/13/2019	41	96.3	85.3	54.8			26.7	7.6	41.2
10/15/2019					5.1	5.1			
10/16/2019							17.7	16.2	
10/17/2019									46.9
10/18/2019	44.9	108	97.8	52.5					
3/2/2020					5.8	5.3			
3/4/2020	49.6								
3/9/2020		100	91.9	64.2			23.7	8.6	46.9
9/22/2020					5.4	5	15.5		
9/23/2020	41.9							8	42
9/24/2020			84.1	55.9					
9/25/2020		92.5							
3/1/2021					5.9	4.1			
3/8/2021	44.9								
3/10/2021								8.5	
3/11/2021		91.9	85.8	56					45.4
3/12/2021							18.4		
9/8/2021					6.1				
9/9/2021						5.3	18.3		
9/14/2021	45.1								
9/15/2021			88.3						
9/16/2021				63				18	46
9/17/2021		98.6							

Prediction Limit

Constituent: Calcium, total (mg/L) Analysis Run 12/16/2021 2:18 PM View: AP 1 Appendix III
Plant McDonough Client: Southern Company Data: McDonough AP

DGWC-68A

9/2/2016	
9/8/2016	
12/7/2016	
12/8/2016	
3/28/2017	
3/30/2017	
3/31/2017	
5/11/2017	
5/12/2017	51.7
5/15/2017	
6/15/2017	
6/16/2017	47.9
7/11/2017	
7/12/2017	
7/13/2017	52.3
8/8/2017	46.3
10/24/2017	
10/26/2017	48.2
11/15/2017	
2/27/2018	
3/1/2018	
3/2/2018	48.9
3/8/2018	
7/12/2018	
7/13/2018	52.4
11/6/2018	
11/7/2018	
11/8/2018	46.8
3/12/2019	
3/13/2019	47.5
10/15/2019	
10/16/2019	49.7
10/17/2019	
10/18/2019	
3/2/2020	
3/4/2020	
3/9/2020	54
9/22/2020	
9/23/2020	50.2
9/24/2020	
9/25/2020	
3/1/2021	
3/8/2021	
3/10/2021	54.2
3/11/2021	
3/12/2021	
9/8/2021	
9/9/2021	
9/14/2021	
9/15/2021	
9/16/2021	60.6
9/17/2021	

Prediction Limit

Constituent: Chloride, Total (mg/L) Analysis Run 12/16/2021 2:18 PM View: AP 1 Appendix III

Plant McDonough Client: Southern Company Data: McDonough AP

	DGWC-40	DGWC-37	DGWC-39	DGWC-38	DGWA-53 (bg)	DGWA-70A (bg)	DGWA-71 (bg)	DGWC-67	DGWC-69
9/2/2016	20								
9/8/2016		6.2	9.2	7.4					
12/7/2016		6.1	8.9	7.4					
12/8/2016	18								
3/28/2017					3.7	3.8	3.6		
3/30/2017	20	6.3	8.7	7.7					
3/31/2017								5.7	4.4
5/11/2017					2.3				
5/12/2017							3.8	5.6	4.4
5/15/2017						2.2			
6/15/2017					2.6	2			
6/16/2017							3.4	5.5	4.7
7/11/2017						2.1	3.1		
7/12/2017					2.3				
7/13/2017	21	6.5	8.4	7.5				5.2	4.7
8/8/2017						2.2			
10/24/2017					2.7	2.4	3.2		
10/26/2017	21	6.4	8.3	8.2				6	4.2
11/15/2017					2.2		3.1		4.7
2/27/2018						2.5	3.2		
3/1/2018		6.3	8.1	8.1					
3/2/2018	19.5							5.8	6.4
3/8/2018					2.4				
7/12/2018	19.9	5.8	7.7	8	2.2				
7/13/2018								5.9	5.3
11/6/2018						2.3	2.6		
11/7/2018					2.3				
11/8/2018	19.3	5.8	7.7	8.1				6.1	5.9
3/12/2019						2.5	3.3		
3/13/2019	19.7	6.9	8.2	9.1	3.6			6.8	6.2
10/15/2019						2.2	3.3		
10/16/2019					2				4.7
10/17/2019								6.9	
10/18/2019	19.2	5.8	8	8.6					
3/2/2020						1.9	3		
3/4/2020	20.6								
3/9/2020		6	7.5	8.1	1.8			6.7	5.7
9/22/2020					1.6	1.9	5.2		
9/23/2020	19.7							7.1	4.7
9/24/2020		5.6		8.2					
9/25/2020			7.9						
3/1/2021						1.9	3.9		
3/8/2021	19.1								
3/10/2021									5
3/11/2021		5.6	7.7	8				7.4	
3/12/2021					2				
9/8/2021							5.9		
9/9/2021					1.8	1.9			
9/14/2021	16.7								
9/15/2021				7.6					
9/16/2021		5.6						7.9	4.5
9/17/2021			8.3						

Prediction Limit

Constituent: Chloride, Total (mg/L) Analysis Run 12/16/2021 2:18 PM View: AP 1 Appendix III
Plant McDonough Client: Southern Company Data: McDonough AP

DGWC-68A

9/2/2016	
9/8/2016	
12/7/2016	
12/8/2016	
3/28/2017	
3/30/2017	
3/31/2017	
5/11/2017	
5/12/2017	4.2
5/15/2017	
6/15/2017	
6/16/2017	4.2
7/11/2017	
7/12/2017	
7/13/2017	4.4
8/8/2017	4.2
10/24/2017	
10/26/2017	4.4
11/15/2017	
2/27/2018	
3/1/2018	
3/2/2018	4.2
3/8/2018	
7/12/2018	
7/13/2018	4
11/6/2018	
11/7/2018	
11/8/2018	<0.25
3/12/2019	
3/13/2019	4.6
10/15/2019	
10/16/2019	4.2
10/17/2019	
10/18/2019	
3/2/2020	
3/4/2020	
3/9/2020	3.6
9/22/2020	
9/23/2020	3.6
9/24/2020	
9/25/2020	
3/1/2021	
3/8/2021	
3/10/2021	3.6
3/11/2021	
3/12/2021	
9/8/2021	
9/9/2021	
9/14/2021	
9/15/2021	
9/16/2021	3.4
9/17/2021	

Prediction Limit

Constituent: Fluoride, total (mg/L) Analysis Run 12/16/2021 2:18 PM View: AP 1 Appendix III

Plant McDonough Client: Southern Company Data: McDonough AP

	DGWC-40	DGWC-39	DGWC-38	DGWC-37	DGWA-71 (bg)	DGWA-53 (bg)	DGWC-67	DGWC-69	DGWC-68A
9/2/2016	0.5								
9/8/2016		0.17 (J)	0.1 (J)	0.08 (J)					
12/7/2016		0.33	0.27 (J)	0.21 (J)					
12/8/2016	0.35								
3/28/2017					0.06 (J)	0.12 (J)			
3/30/2017	0.21 (J)	0.17 (J)	0.12 (J)	0.05 (J)					
3/31/2017							0.02 (J)	0.16 (J)	
5/11/2017						0.07 (J)			
5/12/2017					<0.1		<0.1	0.12 (J)	0.37
5/15/2017									
6/15/2017						0.19 (J)			
6/16/2017					0.008 (J)		0.03 (J)	0.16 (J)	0.12 (J)
7/11/2017					0.007 (J)				
7/12/2017						0.1 (J)			
7/13/2017	0.2 (J)	0.14 (J)	0.13 (J)	0.06 (J)			0.03 (J)	0.13 (J)	0.12 (J)
8/8/2017									0.11 (J)
10/24/2017					<0.1	0.06 (J)			
10/26/2017	0.5	0.54	0.47	0.08 (J)			<0.1	0.29 (J)	0.11 (J)
11/15/2017					<0.1	0.05 (J)		0.28 (J)	
2/27/2018					<0.1				
3/1/2018		0.13	<0.1	0.22					
3/2/2018	0.33						<0.1	0.18	0.23
3/8/2018						<0.1			
7/12/2018	0.57	0.13 (J)	0.23 (J)	0.32		0.071 (J)			
7/13/2018							0.25 (J)	0.19 (J)	0.099 (J)
11/6/2018					<0.1				
11/7/2018						<0.1			
11/8/2018	<0.3 (J)	<0.3 (J)	<0.1	<0.1			0.5	<0.3 (J)	<0.3 (J)
3/12/2019					<0.1				
3/13/2019	0.15 (J)	0.085 (J)	0.084 (J)	0.08 (J)		0.13 (J)	0.07 (J)	0.086 (J)	0.12 (J)
8/27/2019					<0.1				
8/28/2019	0.14	0.086 (J)	0.066 (J)	0.074 (J)		0.42	<0.1	0.07 (J)	0.1
10/15/2019					<0.1				
10/16/2019						0.11 (J)		0.13 (J)	0.093 (J)
10/17/2019							0.038 (J)		
10/18/2019	0.13 (J)	0.14 (J)	0.073 (J)	0.075 (J)					
3/2/2020					<0.1				
3/4/2020	0.11 (J)								
3/9/2020		0.075 (J)	0.064 (J)	0.054 (J)		0.1 (J)	<0.1	0.068 (J)	0.082 (J)
8/11/2020					<0.1				
8/13/2020	0.16	0.076 (J)	0.06 (J)	0.068 (J)		0.062 (J)	<0.1	0.084 (J)	0.076 (J)
9/22/2020					<0.1	0.099 (J)			
9/23/2020	0.054 (J)						<0.1	0.064 (J)	0.07 (J)
9/24/2020			0.057 (J)	0.061 (J)					
9/25/2020		0.086 (J)							
3/1/2021					<0.1				
3/8/2021	0.17								
3/10/2021								0.055 (J)	0.07 (J)
3/11/2021		0.083 (J)	0.058 (J)	0.057 (J)			<0.1		
3/12/2021						0.076 (J)			
9/8/2021					<0.1				
9/9/2021						0.099 (J)			

Prediction Limit

Constituent: Fluoride, total (mg/L) Analysis Run 12/16/2021 2:18 PM View: AP 1 Appendix III
Plant McDonough Client: Southern Company Data: McDonough AP

	DGWC-40	DGWC-39	DGWC-38	DGWC-37	DGWA-71 (bg)	DGWA-53 (bg)	DGWC-67	DGWC-69	DGWC-68A
9/14/2021	0.13								
9/15/2021			0.06 (J)						
9/16/2021				0.084 (J)			0.069 (J)	0.11	0.55
9/17/2021		0.13							

Prediction Limit

Constituent: Fluoride, total (mg/L) Analysis Run 12/16/2021 2:18 PM View: AP 1 Appendix III
Plant McDonough Client: Southern Company Data: McDonough AP

DGWA-70A (bg)

9/2/2016	
9/8/2016	
12/7/2016	
12/8/2016	
3/28/2017	1.2 (O)
3/30/2017	
3/31/2017	
5/11/2017	
5/12/2017	
5/15/2017	0.005 (J)
6/15/2017	0.02 (J)
6/16/2017	
7/11/2017	0.06 (J)
7/12/2017	
7/13/2017	
8/8/2017	0.04 (J)
10/24/2017	<0.1
10/26/2017	
11/15/2017	
2/27/2018	<0.1
3/1/2018	
3/2/2018	
3/8/2018	
7/12/2018	
7/13/2018	
11/6/2018	<0.1
11/7/2018	
11/8/2018	
3/12/2019	0.039 (J)
3/13/2019	
8/27/2019	<0.1
8/28/2019	
10/15/2019	<0.1
10/16/2019	
10/17/2019	
10/18/2019	
3/2/2020	<0.1
3/4/2020	
3/9/2020	
8/11/2020	<0.1
8/13/2020	
9/22/2020	<0.1
9/23/2020	
9/24/2020	
9/25/2020	
3/1/2021	<0.1
3/8/2021	
3/10/2021	
3/11/2021	
3/12/2021	
9/8/2021	
9/9/2021	<0.1

Prediction Limit

Constituent: Fluoride, total (mg/L) Analysis Run 12/16/2021 2:18 PM View: AP 1 Appendix III
Plant McDonough Client: Southern Company Data: McDonough AP

DGWA-70A (bg)

9/14/2021
9/15/2021
9/16/2021
9/17/2021

Prediction Limit

Constituent: pH, Field (SU) Analysis Run 12/16/2021 2:18 PM View: AP 1 Appendix III
 Plant McDonough Client: Southern Company Data: McDonough AP

	DGWC-40	DGWC-39	DGWC-38	DGWC-37	DGWA-71 (bg)	DGWA-53 (bg)	DGWC-69	DGWC-67	DGWC-68A
9/2/2016	4.77								
9/8/2016		6.47	6.01	6.32					
12/7/2016		6.43	6.07	6.32					
12/8/2016	4.77								
3/28/2017					5.94	6.29			
3/30/2017	4.84	6.42	5.97	6.22					
3/31/2017							6.26	6.25	
4/12/2017							6.19		
5/11/2017						6.6			
5/12/2017					5.46		6.2	6.23	6.63
5/15/2017									
6/15/2017						6.41			
6/16/2017					5.81		6.22	6.22	6.63
7/11/2017					5.74				
7/12/2017						5.91			
7/13/2017	4.85	6.47	6.11	6.3			6.35	6.15	6.84
8/8/2017									6.57
10/24/2017					5.86	5.51			
10/26/2017	4.86	6.49	6.06				6.69	6.64	7.01
11/15/2017					5.77	6.5	6.22		
2/27/2018					5.66				
3/1/2018		6.37	6.05	6.28					
3/2/2018	4.67						6.1	6.18	6.58
3/8/2018						6.18			
7/10/2018					5.63				
7/12/2018	4.63	6.45	6.05	6.43		6.33			
7/13/2018							5.95	6.19	6.62
11/6/2018					5.79				
11/7/2018						6.22			
11/8/2018	4.79	6.49	6.07	6.36			6	6.23	6.5
3/12/2019					5.74				
3/13/2019	4.6	6.28	6.05	6.26		6	6.08	6.19	6.57
8/27/2019					5.87				
8/28/2019	4.68	6.41	5.98	6.27		6.04	6.09	6.22	6.6
10/15/2019					5.88				
10/16/2019						6.69	6.19		6.6
10/17/2019								6.14	
10/18/2019	4.71	6.35	6	6.26					
3/2/2020					5.77				
3/4/2020	4.64								
3/9/2020		6.37	6.12	6.34		6.41	6.12	6.23	6.6
8/11/2020					5.96				
8/13/2020	4.65	6.39	6.05	6.34		6.17	6.26	6.28	6.63
9/22/2020					6.06	6.43			
9/23/2020	4.78						6.08	6.23	6.6
9/24/2020			6.05	6.3					
9/25/2020		6.38							
3/1/2021					5.8				
3/8/2021	4.79								
3/10/2021							6.13		6.74
3/11/2021		6.66	6.22	6.49				6.28	
3/12/2021						6.38			

Prediction Limit

Constituent: pH, Field (SU) Analysis Run 12/16/2021 2:18 PM View: AP 1 Appendix III
Plant McDonough Client: Southern Company Data: McDonough AP

DGWA-70A (bg)

9/2/2016	
9/8/2016	
12/7/2016	
12/8/2016	
3/28/2017	
3/30/2017	
3/31/2017	
4/12/2017	
5/11/2017	
5/12/2017	
5/15/2017	5.72
6/15/2017	5.74
6/16/2017	
7/11/2017	5.62
7/12/2017	
7/13/2017	
8/8/2017	5.6
10/24/2017	5.71
10/26/2017	
11/15/2017	
2/27/2018	5.5
3/1/2018	
3/2/2018	
3/8/2018	
7/10/2018	5.44
7/12/2018	
7/13/2018	
11/6/2018	5.71
11/7/2018	
11/8/2018	
3/12/2019	5.52
3/13/2019	
8/27/2019	5.53
8/28/2019	
10/15/2019	5.61
10/16/2019	
10/17/2019	
10/18/2019	
3/2/2020	5.54
3/4/2020	
3/9/2020	
8/11/2020	5.86
8/13/2020	
9/22/2020	6.01
9/23/2020	
9/24/2020	
9/25/2020	
3/1/2021	5.43
3/8/2021	
3/10/2021	
3/11/2021	
3/12/2021	

Prediction Limit

Constituent: pH, Field (SU) Analysis Run 12/16/2021 2:18 PM View: AP 1 Appendix III
Plant McDonough Client: Southern Company Data: McDonough AP

DGWA-70A (bg)

9/8/2021
9/9/2021
9/14/2021
9/15/2021
9/16/2021
9/17/2021
10/27/2021

5.5

Prediction Limit

Constituent: Sulfate as SO4 (mg/L) Analysis Run 12/16/2021 2:18 PM View: AP 1 Appendix III

Plant McDonough Client: Southern Company Data: McDonough AP

	DGWC-40	DGWC-39	DGWC-38	DGWC-37	DGWA-71 (bg)	DGWA-70A (bg)	DGWA-53 (bg)	DGWC-67	DGWC-69
9/2/2016	230								
9/8/2016		280	270	97					
12/7/2016		250	250	100					
12/8/2016	270								
3/28/2017					17	2.7	49		
3/30/2017	240	310	290	110					
3/31/2017								110	21
5/11/2017							21		
5/12/2017					17			100	17
5/15/2017						1			
6/15/2017						0.86 (J)	16		
6/16/2017					11			100	20
7/11/2017					11	1.4			
7/12/2017							10		
7/13/2017	220	220	270	200 (O)				110	17
8/8/2017						1.5			
10/24/2017					9.6	1.4	15		
10/26/2017	220	210	260	97				100	31
11/15/2017					7.8		3.8		29
2/27/2018					7.4	0.54 (J)			
3/1/2018		166	242	94.6					
3/2/2018	219							98.5	10.1
3/8/2018							9.7		
7/12/2018	222	169	256	89.2			8		
7/13/2018								136	8.6
11/6/2018					7.3	<1 (J)			
11/7/2018							12.8		
11/8/2018	273	200	291	102				118	9.7
3/12/2019					7	0.35 (J)			
3/13/2019	445	265	300	92.2			23.7	233	8.4
10/15/2019					7.4	0.16 (J)			
10/16/2019							15.1		13.3
10/17/2019								99.4	
10/18/2019	205	182	239	76.4					
3/2/2020					8.5	<1			
3/4/2020	177								
3/9/2020		171	244	90.3			9.5	100	7.6
9/22/2020					6.5	<1	13.5		
9/23/2020	190							99.8	5.9
9/24/2020			240	84.1					
9/25/2020		153							
3/1/2021					5.2	<1			
3/8/2021	191								
3/10/2021									6.4
3/11/2021		123	154	81.9				76.7	
3/12/2021							8.8		
9/8/2021					6.1				
9/9/2021						<1	11.9		
9/14/2021	186								
9/15/2021			219						
9/16/2021				95				101	17.9
9/17/2021		156							

Prediction Limit

Constituent: Sulfate as SO4 (mg/L) Analysis Run 12/16/2021 2:18 PM View: AP 1 Appendix III
Plant McDonough Client: Southern Company Data: McDonough AP

DGWC-68A

9/2/2016	
9/8/2016	
12/7/2016	
12/8/2016	
3/28/2017	
3/30/2017	
3/31/2017	
5/11/2017	
5/12/2017	50
5/15/2017	
6/15/2017	
6/16/2017	47
7/11/2017	
7/12/2017	
7/13/2017	49
8/8/2017	48
10/24/2017	
10/26/2017	48
11/15/2017	
2/27/2018	
3/1/2018	
3/2/2018	44.7
3/8/2018	
7/12/2018	
7/13/2018	43.3
11/6/2018	
11/7/2018	
11/8/2018	43.5
3/12/2019	
3/13/2019	44.1
10/15/2019	
10/16/2019	32.1
10/17/2019	
10/18/2019	
3/2/2020	
3/4/2020	
3/9/2020	37.4
9/22/2020	
9/23/2020	38.7
9/24/2020	
9/25/2020	
3/1/2021	
3/8/2021	
3/10/2021	38.4
3/11/2021	
3/12/2021	
9/8/2021	
9/9/2021	
9/14/2021	
9/15/2021	
9/16/2021	22.3
9/17/2021	

Prediction Limit

Constituent: Total Dissolved Solids [TDS] (mg/L) Analysis Run 12/16/2021 2:18 PM View: AP 1 Appendix III

Plant McDonough Client: Southern Company Data: McDonough AP

	DGWC-38	DGWC-37	DGWC-39	DGWC-40	DGWA-70A (bg)	DGWA-71 (bg)	DGWA-53 (bg)	DGWC-67	DGWC-69
9/2/2016				583 (O)					
9/8/2016	437	279	522						
12/7/2016	478	300	565						
12/8/2016				319					
3/28/2017					39	90	202		
3/30/2017	448	273	496	344					
3/31/2017								270	138
5/11/2017							241		
5/12/2017						92		287	243
5/15/2017					88				
6/15/2017					65		251		
6/16/2017						100		309	155
7/11/2017					25	59			
7/12/2017							218		
7/13/2017	504	312	508	386				275	122
8/8/2017					53				
10/24/2017					49	117	671 (O)		
10/26/2017	554	340	532	373				319	234
11/15/2017						90	241		188
2/27/2018					43	79			
3/1/2018	492	311	440						
3/2/2018				359				264	73
3/8/2018							213		
7/12/2018	478	290	463	365			198		
7/13/2018								297	95
11/6/2018					65	85			
11/7/2018							200		
11/8/2018	507	295	485	399				295	112
3/12/2019					43	74			
3/13/2019	487	286	526	351			201	278	95
10/15/2019					70	89			
10/16/2019							126		108
10/17/2019								281	
10/18/2019	494	269	489	360					
3/2/2020					52	67			
3/4/2020				400					
3/9/2020	554	357	508				171	209	115
9/22/2020					46	74	142		
9/23/2020				357				296	102
9/24/2020	489	280							
9/25/2020			460						
3/1/2021					25	62			
3/8/2021				346					
3/10/2021									78
3/11/2021	463	255	440					265	
3/12/2021							124		
9/8/2021						75			
9/9/2021					53		131		
9/14/2021				347					
9/15/2021	474								
9/16/2021		278						282	113
9/17/2021			446						

Prediction Limit

Constituent: Total Dissolved Solids [TDS] (mg/L) Analysis Run 12/16/2021 2:18 PM View: AP 1 Appendix III
Plant McDonough Client: Southern Company Data: McDonough AP

DGWC-68A

9/2/2016	
9/8/2016	
12/7/2016	
12/8/2016	
3/28/2017	
3/30/2017	
3/31/2017	
5/11/2017	
5/12/2017	300
5/15/2017	
6/15/2017	
6/16/2017	271
7/11/2017	
7/12/2017	
7/13/2017	246
8/8/2017	278
10/24/2017	
10/26/2017	287
11/15/2017	
2/27/2018	
3/1/2018	
3/2/2018	252
3/8/2018	
7/12/2018	
7/13/2018	275
11/6/2018	
11/7/2018	
11/8/2018	277
3/12/2019	
3/13/2019	267
10/15/2019	
10/16/2019	218
10/17/2019	
10/18/2019	
3/2/2020	
3/4/2020	
3/9/2020	188
9/22/2020	
9/23/2020	251
9/24/2020	
9/25/2020	
3/1/2021	
3/8/2021	
3/10/2021	232
3/11/2021	
3/12/2021	
9/8/2021	
9/9/2021	
9/14/2021	
9/15/2021	
9/16/2021	259
9/17/2021	

FIGURE E.

Appendix III Trend Tests - Prediction Limits Exceedances - Significant Results

Plant McDonough Client: Southern Company Data: McDonough AP Printed 12/16/2021, 2:24 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Calcium, total (mg/L)	DGWA-53 (bg)	-4.533	-57	-48	Yes	14	0	n/a	n/a	0.01	NP
Chloride, Total (mg/L)	DGWA-53 (bg)	-0.1941	-59	-53	Yes	15	0	n/a	n/a	0.01	NP
Chloride, Total (mg/L)	DGWC-39	-0.263	-53	-48	Yes	14	0	n/a	n/a	0.01	NP
Chloride, Total (mg/L)	DGWC-67	0.4926	71	48	Yes	14	0	n/a	n/a	0.01	NP
Sulfate as SO4 (mg/L)	DGWA-70A (bg)	-0.2582	-50	-48	Yes	14	35.71	n/a	n/a	0.01	NP
Sulfate as SO4 (mg/L)	DGWA-71 (bg)	-1.564	-72	-48	Yes	14	0	n/a	n/a	0.01	NP
Sulfate as SO4 (mg/L)	DGWC-39	-25.51	-57	-48	Yes	14	0	n/a	n/a	0.01	NP
Total Dissolved Solids [TDS] (mg/L)	DGWA-53 (bg)	-26.59	-62	-48	Yes	14	0	n/a	n/a	0.01	NP

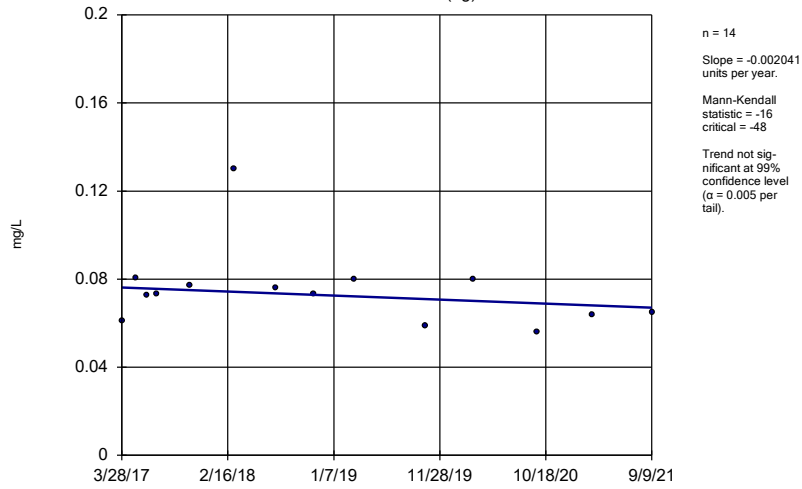
Appendix III Trend Tests - Prediction Limits Exceedances - All Results

Plant McDonough Client: Southern Company Data: McDonough AP Printed 12/16/2021, 2:24 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Boron, total (mg/L)	DGWA-53 (bg)	-0.002041	-16	-48	No	14	0	n/a	n/a	0.01	NP
Boron, total (mg/L)	DGWA-70A (bg)	0	14	48	No	14	57.14	n/a	n/a	0.01	NP
Boron, total (mg/L)	DGWA-71 (bg)	0	-2	-43	No	13	23.08	n/a	n/a	0.01	NP
Boron, total (mg/L)	DGWC-37	-0.08919	-35	-48	No	14	0	n/a	n/a	0.01	NP
Boron, total (mg/L)	DGWC-38	-0.03951	-20	-48	No	14	0	n/a	n/a	0.01	NP
Boron, total (mg/L)	DGWC-39	-0.1094	-41	-48	No	14	0	n/a	n/a	0.01	NP
Boron, total (mg/L)	DGWC-40	-0.03842	-48	-48	No	14	0	n/a	n/a	0.01	NP
Boron, total (mg/L)	DGWC-67	0.0544	26	48	No	14	0	n/a	n/a	0.01	NP
Boron, total (mg/L)	DGWC-68A	-0.1038	-42	-48	No	14	0	n/a	n/a	0.01	NP
Boron, total (mg/L)	DGWC-69	-0.06702	-48	-58	No	16	0	n/a	n/a	0.01	NP
Calcium, total (mg/L)	DGWA-53 (bg)	-4.533	-57	-48	Yes	14	0	n/a	n/a	0.01	NP
Calcium, total (mg/L)	DGWA-70A (bg)	-0.1515	-29	-48	No	14	7.143	n/a	n/a	0.01	NP
Calcium, total (mg/L)	DGWA-71 (bg)	-0.6883	-36	-43	No	13	7.692	n/a	n/a	0.01	NP
Calcium, total (mg/L)	DGWC-37	0.5433	10	48	No	14	0	n/a	n/a	0.01	NP
Calcium, total (mg/L)	DGWC-38	3.389	43	48	No	14	0	n/a	n/a	0.01	NP
Calcium, total (mg/L)	DGWC-39	0.8605	15	48	No	14	0	n/a	n/a	0.01	NP
Calcium, total (mg/L)	DGWC-40	0.9025	32	48	No	14	0	n/a	n/a	0.01	NP
Calcium, total (mg/L)	DGWC-67	0.776	31	48	No	14	0	n/a	n/a	0.01	NP
Calcium, total (mg/L)	DGWC-68A	0.9653	37	48	No	14	0	n/a	n/a	0.01	NP
Chloride, Total (mg/L)	DGWA-53 (bg)	-0.1941	-59	-53	Yes	15	0	n/a	n/a	0.01	NP
Chloride, Total (mg/L)	DGWA-70A (bg)	-0.08417	-33	-48	No	14	0	n/a	n/a	0.01	NP
Chloride, Total (mg/L)	DGWA-71 (bg)	0.07636	12	48	No	14	0	n/a	n/a	0.01	NP
Chloride, Total (mg/L)	DGWC-37	-0.1431	-42	-48	No	14	0	n/a	n/a	0.01	NP
Chloride, Total (mg/L)	DGWC-38	0.1365	29	48	No	14	0	n/a	n/a	0.01	NP
Chloride, Total (mg/L)	DGWC-39	-0.263	-53	-48	Yes	14	0	n/a	n/a	0.01	NP
Chloride, Total (mg/L)	DGWC-40	-0.1993	-32	-48	No	14	0	n/a	n/a	0.01	NP
Chloride, Total (mg/L)	DGWC-67	0.4926	71	48	Yes	14	0	n/a	n/a	0.01	NP
Fluoride, total (mg/L)	DGWA-53 (bg)	-0.001259	-9	-63	No	17	11.76	n/a	n/a	0.01	NP
Fluoride, total (mg/L)	DGWA-70A (bg)	0.01092	48	53	No	15	66.67	n/a	n/a	0.01	NP
Fluoride, total (mg/L)	DGWA-71 (bg)	0	32	58	No	16	81.25	n/a	n/a	0.01	NP
Fluoride, total (mg/L)	DGWC-68A	-0.01382	-57	-58	No	16	6.25	n/a	n/a	0.01	NP
pH, Field (SU)	DGWA-53 (bg)	0.02897	13	63	No	17	0	n/a	n/a	0.01	NP
pH, Field (SU)	DGWA-70A (bg)	-0.02535	-22	-58	No	16	0	n/a	n/a	0.01	NP
pH, Field (SU)	DGWA-71 (bg)	0.03005	28	63	No	17	0	n/a	n/a	0.01	NP
pH, Field (SU)	DGWC-40	-0.02032	-21	-58	No	16	0	n/a	n/a	0.01	NP
pH, Field (SU)	DGWC-68A	-0.007008	-16	-58	No	16	0	n/a	n/a	0.01	NP
Sulfate as SO4 (mg/L)	DGWA-53 (bg)	-1.708	-31	-53	No	15	0	n/a	n/a	0.01	NP
Sulfate as SO4 (mg/L)	DGWA-70A (bg)	-0.2582	-50	-48	Yes	14	35.71	n/a	n/a	0.01	NP
Sulfate as SO4 (mg/L)	DGWA-71 (bg)	-1.564	-72	-48	Yes	14	0	n/a	n/a	0.01	NP
Sulfate as SO4 (mg/L)	DGWC-37	-3.418	-37	-43	No	13	0	n/a	n/a	0.01	NP
Sulfate as SO4 (mg/L)	DGWC-38	-9.784	-40	-48	No	14	0	n/a	n/a	0.01	NP
Sulfate as SO4 (mg/L)	DGWC-39	-25.51	-57	-48	Yes	14	0	n/a	n/a	0.01	NP
Sulfate as SO4 (mg/L)	DGWC-40	-9.852	-42	-48	No	14	0	n/a	n/a	0.01	NP
Sulfate as SO4 (mg/L)	DGWC-67	-0.2466	-14	-48	No	14	0	n/a	n/a	0.01	NP
Total Dissolved Solids [TDS] (mg/L)	DGWA-53 (bg)	-26.59	-62	-48	Yes	14	0	n/a	n/a	0.01	NP
Total Dissolved Solids [TDS] (mg/L)	DGWA-70A (bg)	-1.029	-7	-48	No	14	0	n/a	n/a	0.01	NP
Total Dissolved Solids [TDS] (mg/L)	DGWA-71 (bg)	-5.605	-39	-48	No	14	0	n/a	n/a	0.01	NP
Total Dissolved Solids [TDS] (mg/L)	DGWC-37	-4.604	-23	-48	No	14	0	n/a	n/a	0.01	NP
Total Dissolved Solids [TDS] (mg/L)	DGWC-38	2.895	9	48	No	14	0	n/a	n/a	0.01	NP
Total Dissolved Solids [TDS] (mg/L)	DGWC-39	-15.12	-39	-48	No	14	0	n/a	n/a	0.01	NP
Total Dissolved Solids [TDS] (mg/L)	DGWC-40	-0.1363	0	43	No	13	0	n/a	n/a	0.01	NP
Total Dissolved Solids [TDS] (mg/L)	DGWC-67	-3.971	-11	-48	No	14	0	n/a	n/a	0.01	NP

Sen's Slope Estimator

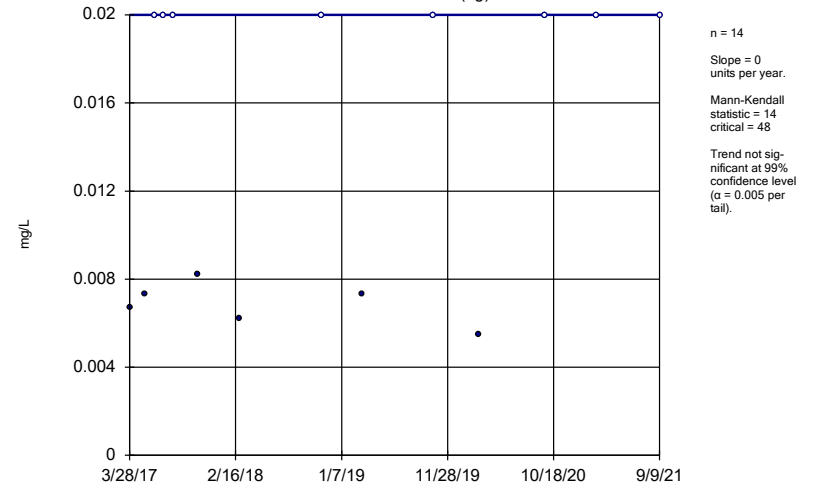
DGWA-53 (bg)



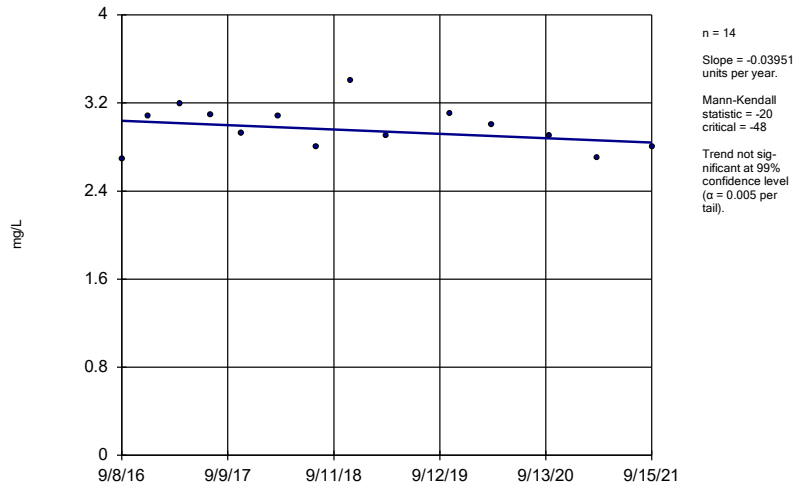
Constituent: Boron, total Analysis Run 12/16/2021 2:23 PM View: AP 1 Appendix III Trend Tests
Plant McDonough Client: Southern Company Data: McDonough AP

Sen's Slope Estimator

DGWA-70A (bg)

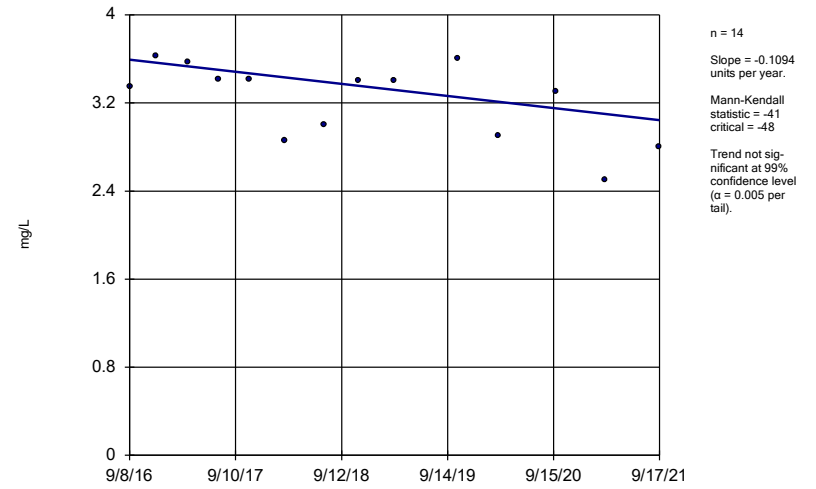


Sen's Slope Estimator
DGWC-38



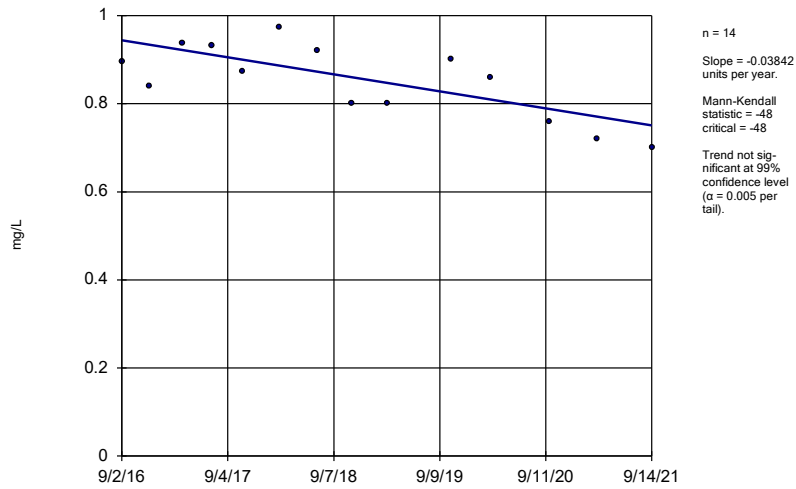
Constituent: Boron, total Analysis Run 12/16/2021 2:23 PM View: AP 1 Appendix III Trend Tests
Plant McDonough Client: Southern Company Data: McDonough AP

Sen's Slope Estimator
DGWC-39



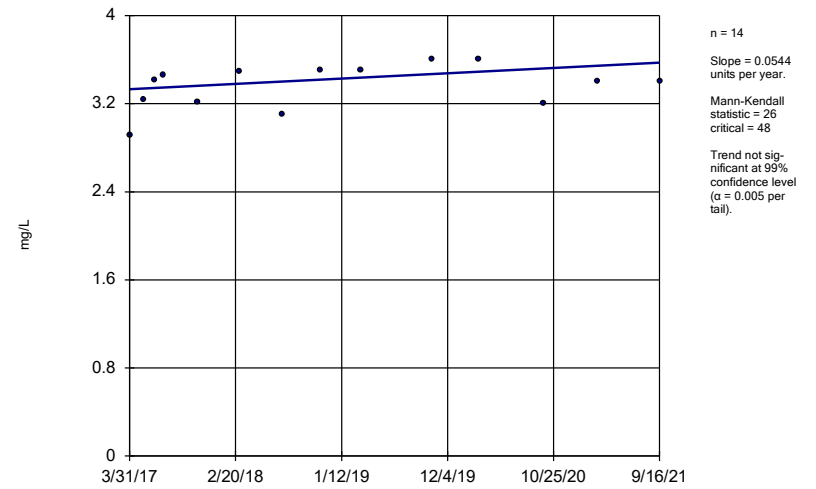
Constituent: Boron, total Analysis Run 12/16/2021 2:23 PM View: AP 1 Appendix III Trend Tests
Plant McDonough Client: Southern Company Data: McDonough AP

Sen's Slope Estimator
DGWC-40



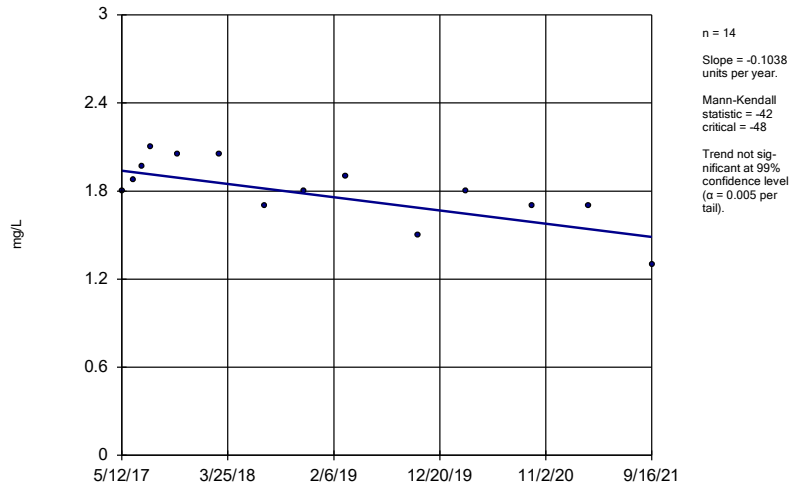
Constituent: Boron, total Analysis Run 12/16/2021 2:23 PM View: AP 1 Appendix III Trend Tests
Plant McDonough Client: Southern Company Data: McDonough AP

Sen's Slope Estimator
DGWC-67



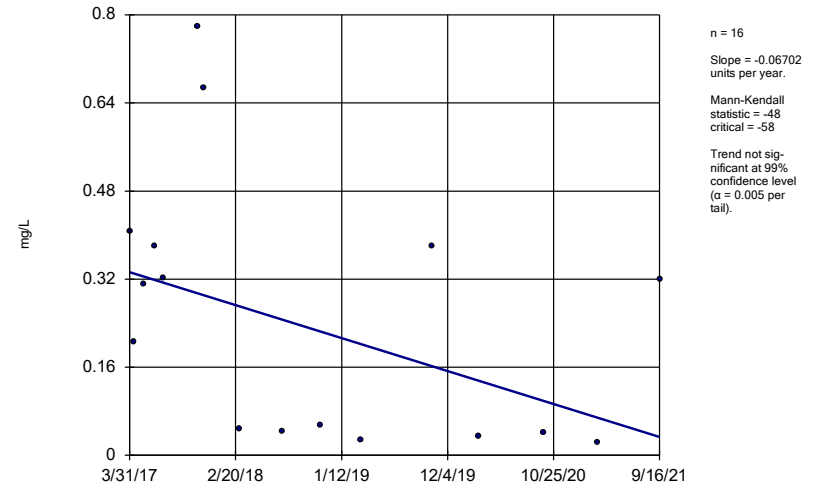
Constituent: Boron, total Analysis Run 12/16/2021 2:23 PM View: AP 1 Appendix III Trend Tests
Plant McDonough Client: Southern Company Data: McDonough AP

Sen's Slope Estimator
DGWC-68A



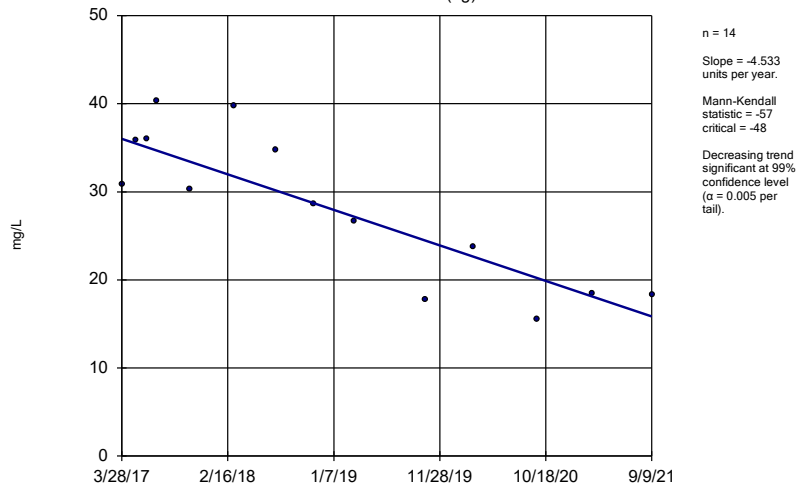
Constituent: Boron, total Analysis Run 12/16/2021 2:23 PM View: AP 1 Appendix III Trend Tests
Plant McDonough Client: Southern Company Data: McDonough AP

Sen's Slope Estimator
DGWC-69



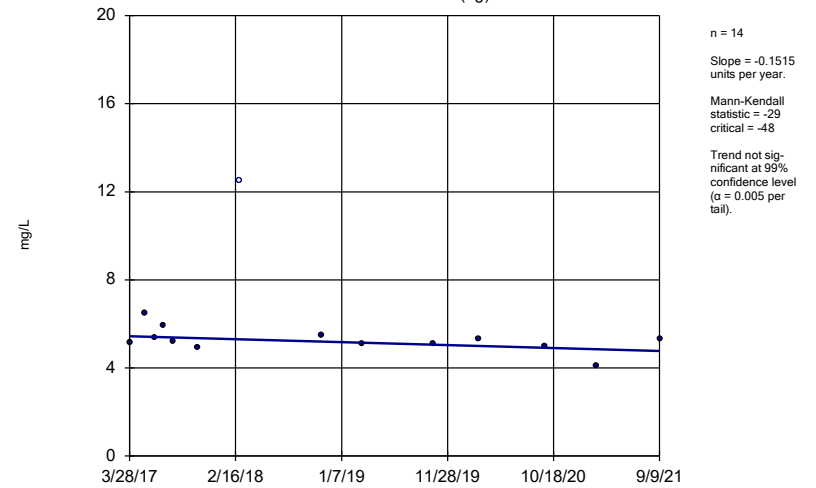
Constituent: Boron, total Analysis Run 12/16/2021 2:23 PM View: AP 1 Appendix III Trend Tests
Plant McDonough Client: Southern Company Data: McDonough AP

Sen's Slope Estimator
DGWA-53 (bg)



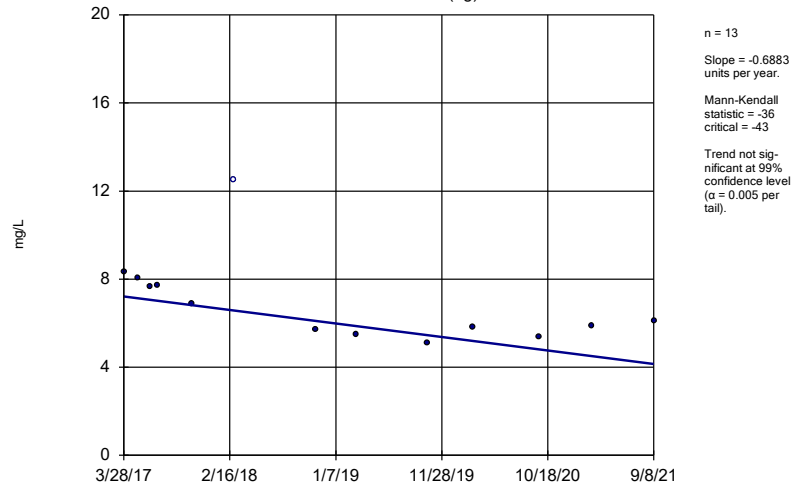
Constituent: Calcium, total Analysis Run 12/16/2021 2:23 PM View: AP 1 Appendix III Trend Tests
Plant McDonough Client: Southern Company Data: McDonough AP

Sen's Slope Estimator
DGWA-70A (bg)



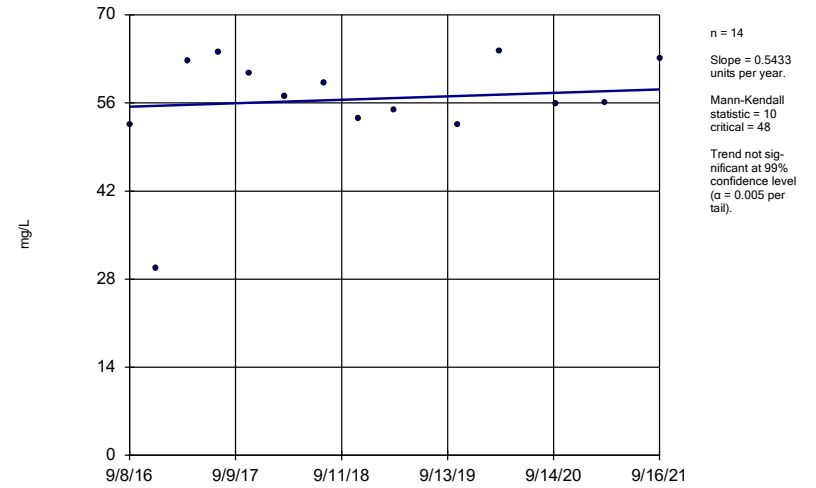
Constituent: Calcium, total Analysis Run 12/16/2021 2:23 PM View: AP 1 Appendix III Trend Tests
Plant McDonough Client: Southern Company Data: McDonough AP

Sen's Slope Estimator
 DGWA-71 (bg)



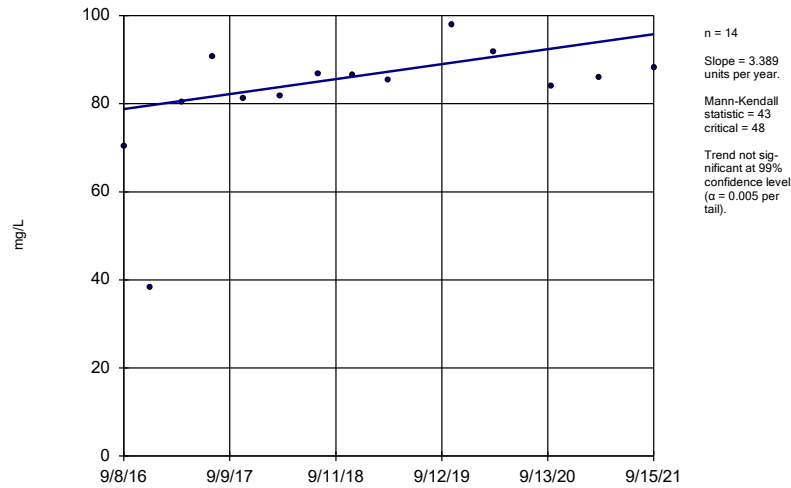
Constituent: Calcium, total Analysis Run 12/16/2021 2:23 PM View: AP 1 Appendix III Trend Tests
 Plant McDonough Client: Southern Company Data: McDonough AP

Sen's Slope Estimator
 DGWC-37



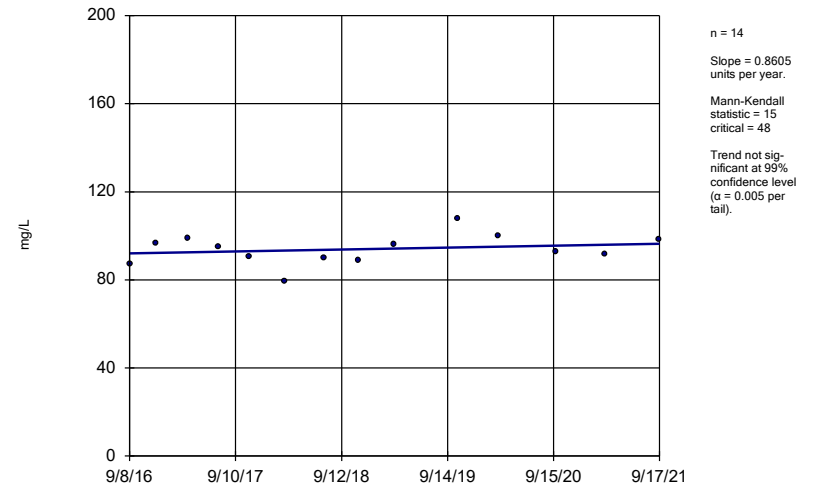
Constituent: Calcium, total Analysis Run 12/16/2021 2:23 PM View: AP 1 Appendix III Trend Tests
 Plant McDonough Client: Southern Company Data: McDonough AP

Sen's Slope Estimator
 DGWC-38



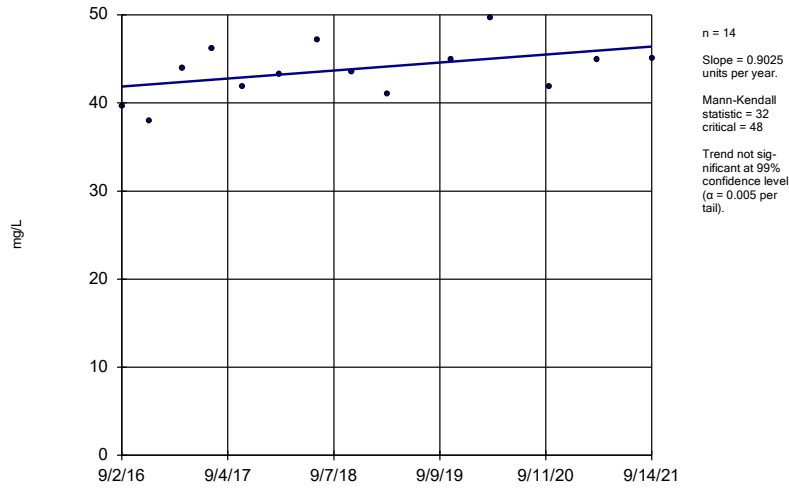
Constituent: Calcium, total Analysis Run 12/16/2021 2:23 PM View: AP 1 Appendix III Trend Tests
 Plant McDonough Client: Southern Company Data: McDonough AP

Sen's Slope Estimator
 DGWC-39



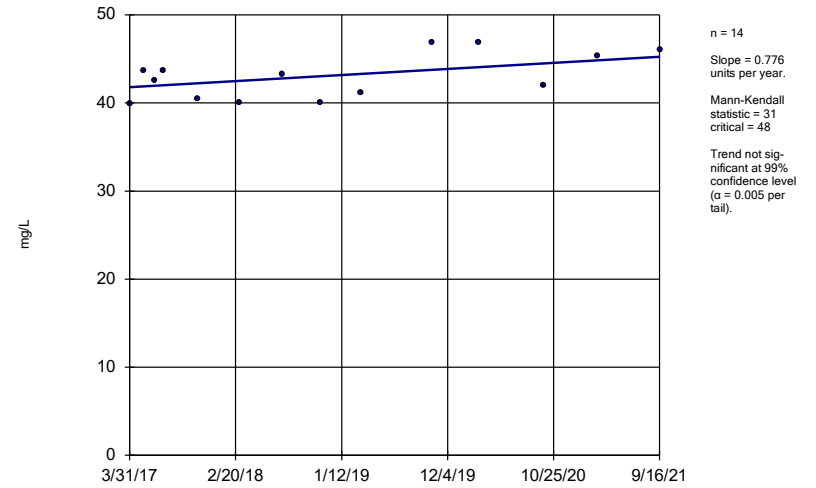
Constituent: Calcium, total Analysis Run 12/16/2021 2:23 PM View: AP 1 Appendix III Trend Tests
 Plant McDonough Client: Southern Company Data: McDonough AP

Sen's Slope Estimator
DGWC-40



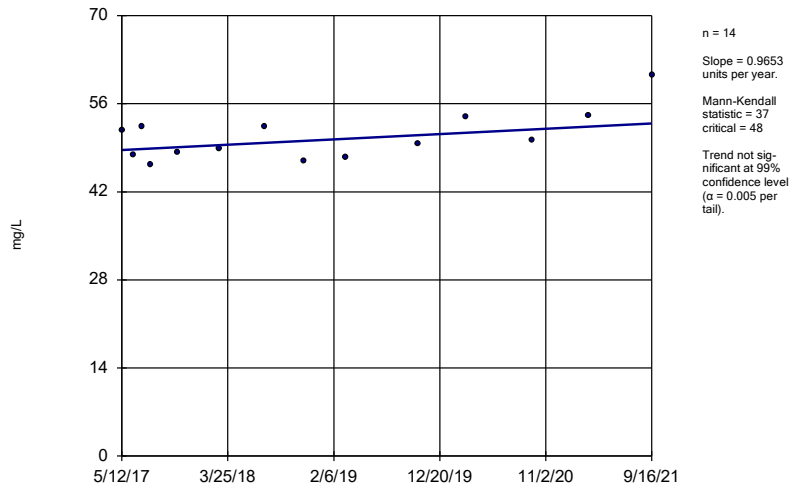
Constituent: Calcium, total Analysis Run 12/16/2021 2:23 PM View: AP 1 Appendix III Trend Tests
Plant McDonough Client: Southern Company Data: McDonough AP

Sen's Slope Estimator
DGWC-67



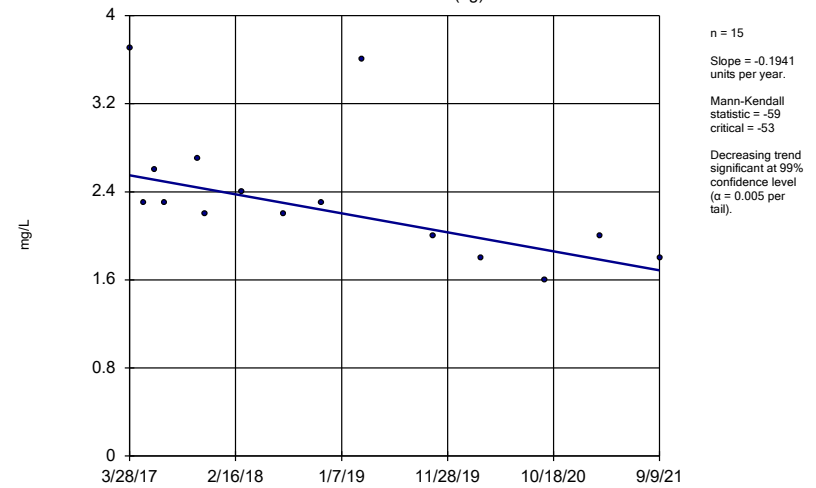
Constituent: Calcium, total Analysis Run 12/16/2021 2:23 PM View: AP 1 Appendix III Trend Tests
Plant McDonough Client: Southern Company Data: McDonough AP

Sen's Slope Estimator
DGWC-68A



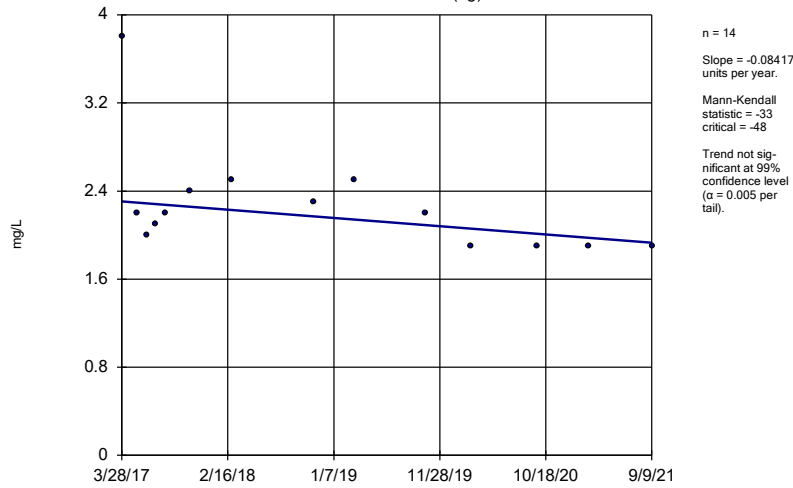
Constituent: Calcium, total Analysis Run 12/16/2021 2:23 PM View: AP 1 Appendix III Trend Tests
Plant McDonough Client: Southern Company Data: McDonough AP

Sen's Slope Estimator
DGWA-53 (bg)



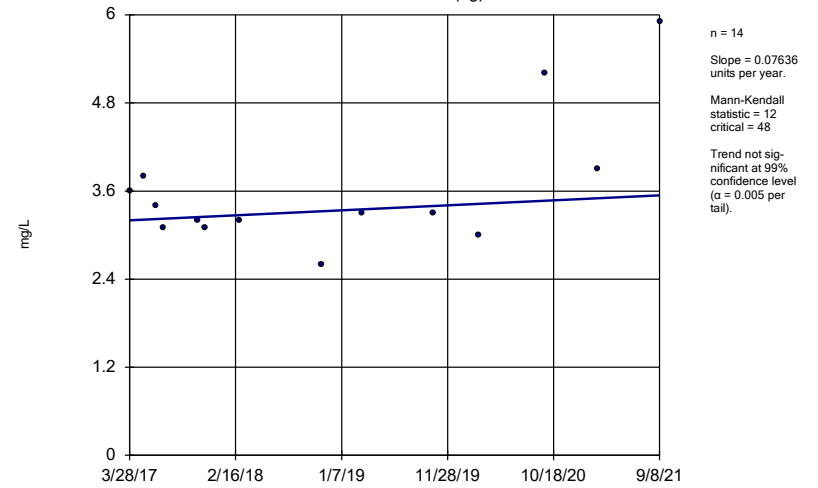
Constituent: Chloride, Total Analysis Run 12/16/2021 2:23 PM View: AP 1 Appendix III Trend Tests
Plant McDonough Client: Southern Company Data: McDonough AP

Sen's Slope Estimator
DGWA-70A (bg)



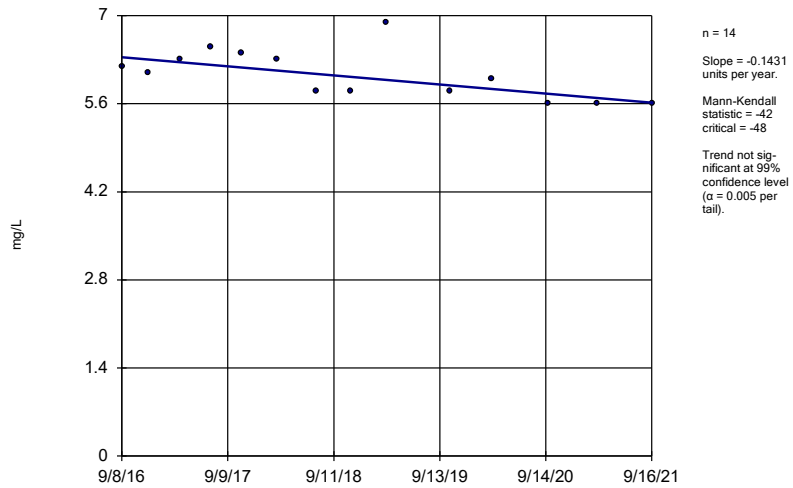
Constituent: Chloride, Total Analysis Run 12/16/2021 2:23 PM View: AP 1 Appendix III Trend Tests
Plant McDonough Client: Southern Company Data: McDonough AP

Sen's Slope Estimator
DGWA-71 (bg)



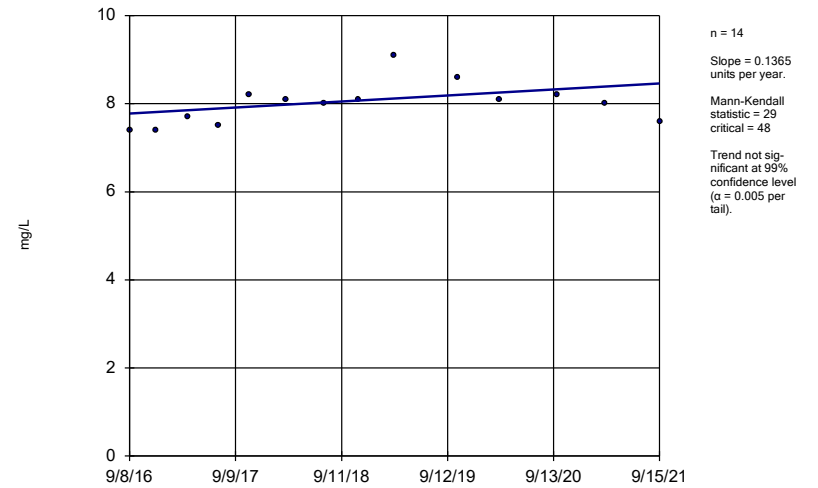
Constituent: Chloride, Total Analysis Run 12/16/2021 2:23 PM View: AP 1 Appendix III Trend Tests
Plant McDonough Client: Southern Company Data: McDonough AP

Sen's Slope Estimator
DGWC-37



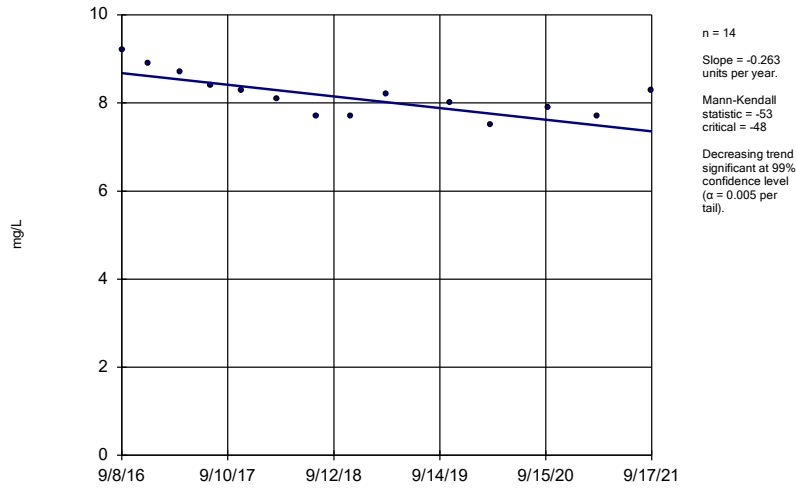
Constituent: Chloride, Total Analysis Run 12/16/2021 2:23 PM View: AP 1 Appendix III Trend Tests
Plant McDonough Client: Southern Company Data: McDonough AP

Sen's Slope Estimator
DGWC-38



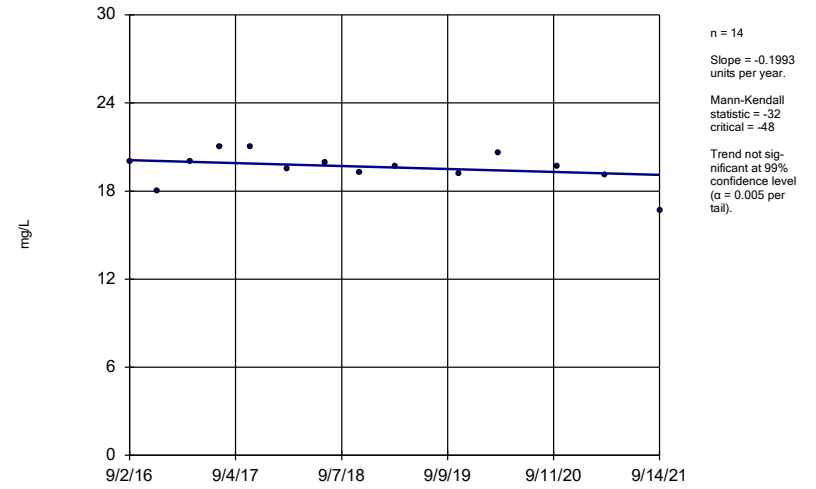
Constituent: Chloride, Total Analysis Run 12/16/2021 2:23 PM View: AP 1 Appendix III Trend Tests
Plant McDonough Client: Southern Company Data: McDonough AP

Sen's Slope Estimator
DGWC-39



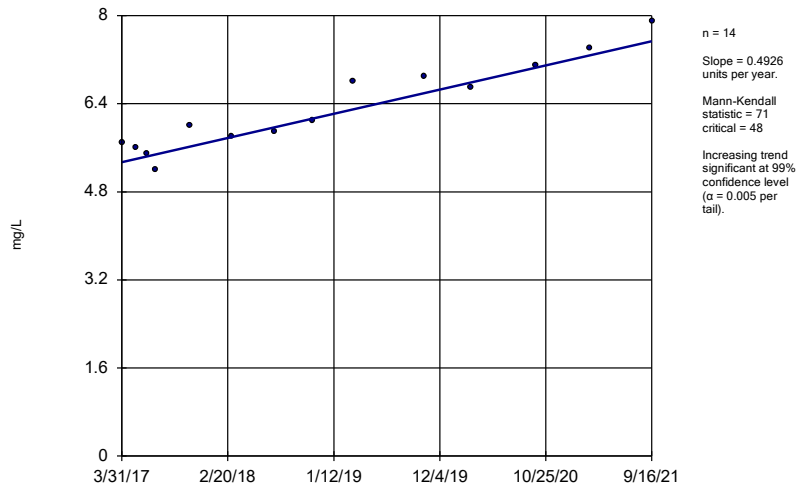
Constituent: Chloride, Total Analysis Run 12/16/2021 2:23 PM View: AP 1 Appendix III Trend Tests
Plant McDonough Client: Southern Company Data: McDonough AP

Sen's Slope Estimator
DGWC-40



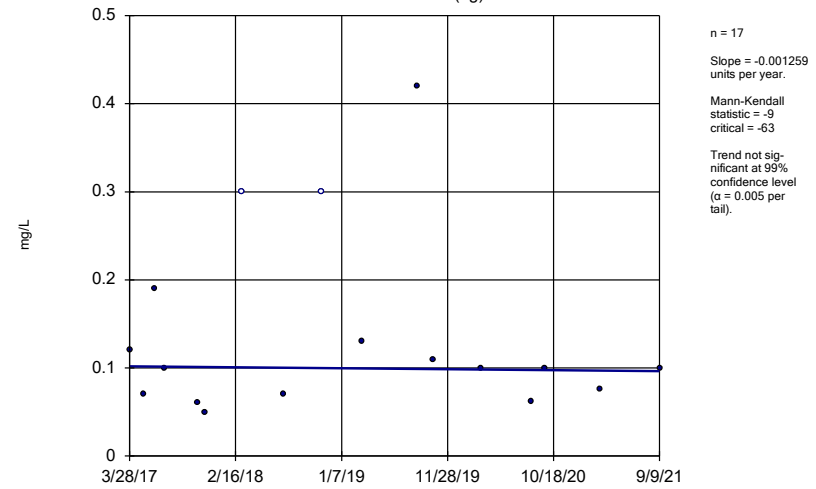
Constituent: Chloride, Total Analysis Run 12/16/2021 2:23 PM View: AP 1 Appendix III Trend Tests
Plant McDonough Client: Southern Company Data: McDonough AP

Sen's Slope Estimator
DGWC-67



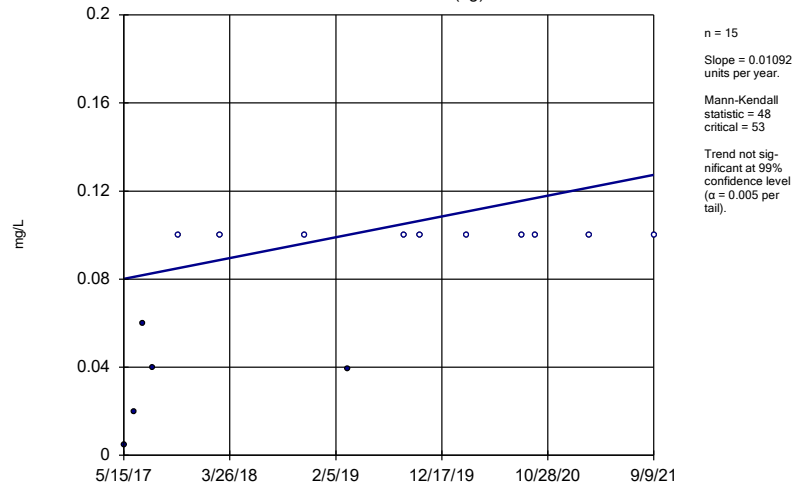
Constituent: Chloride, Total Analysis Run 12/16/2021 2:23 PM View: AP 1 Appendix III Trend Tests
Plant McDonough Client: Southern Company Data: McDonough AP

Sen's Slope Estimator
DGWA-53 (bg)



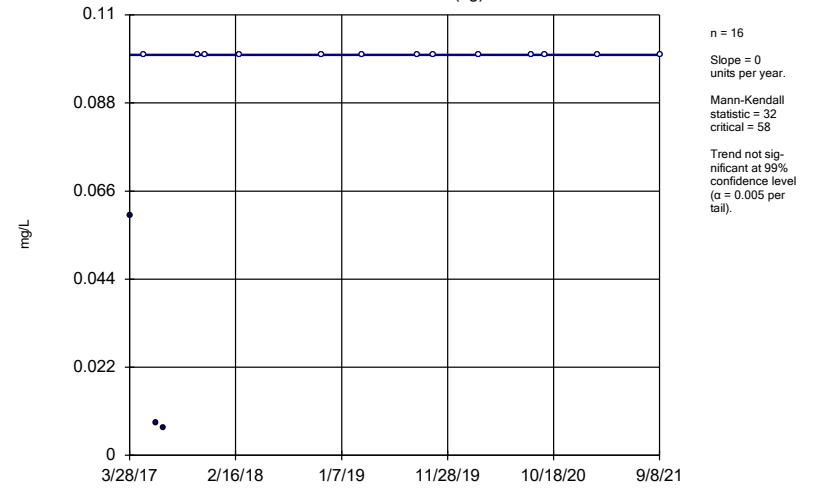
Constituent: Fluoride, total Analysis Run 12/16/2021 2:23 PM View: AP 1 Appendix III Trend Tests
Plant McDonough Client: Southern Company Data: McDonough AP

Sen's Slope Estimator
DGWA-70A (bg)



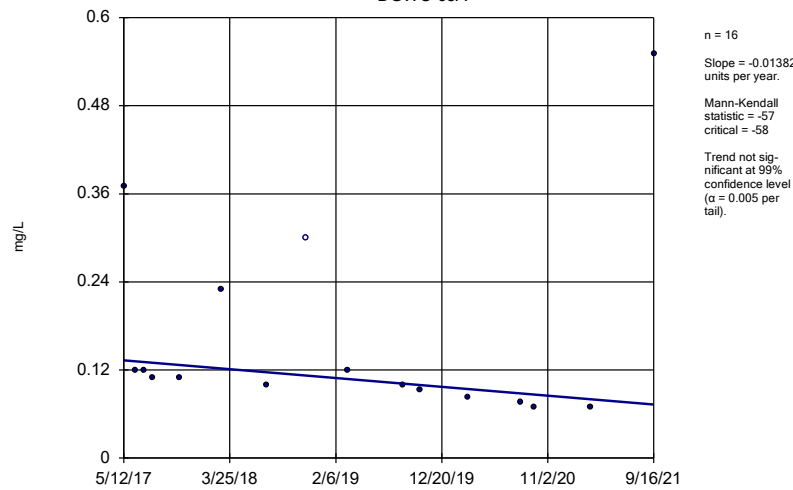
Constituent: Fluoride, total Analysis Run 12/16/2021 2:23 PM View: AP 1 Appendix III Trend Tests
Plant McDonough Client: Southern Company Data: McDonough AP

Sen's Slope Estimator
DGWA-71 (bg)



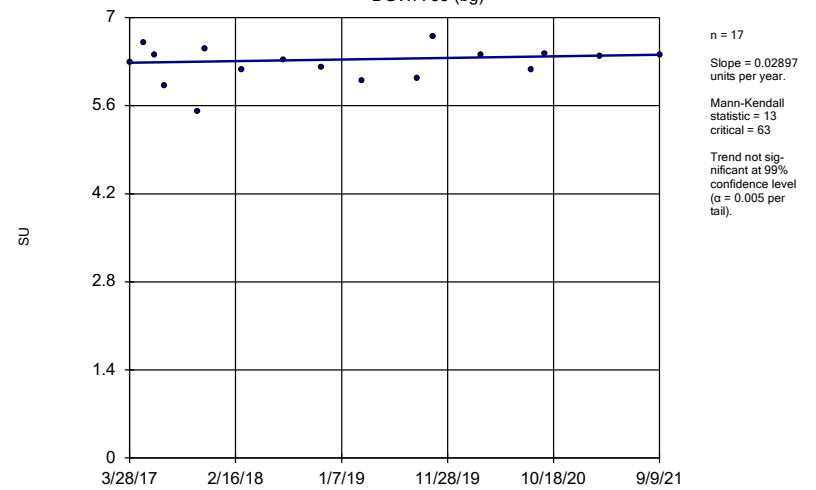
Constituent: Fluoride, total Analysis Run 12/16/2021 2:23 PM View: AP 1 Appendix III Trend Tests
Plant McDonough Client: Southern Company Data: McDonough AP

Sen's Slope Estimator
DGWC-68A



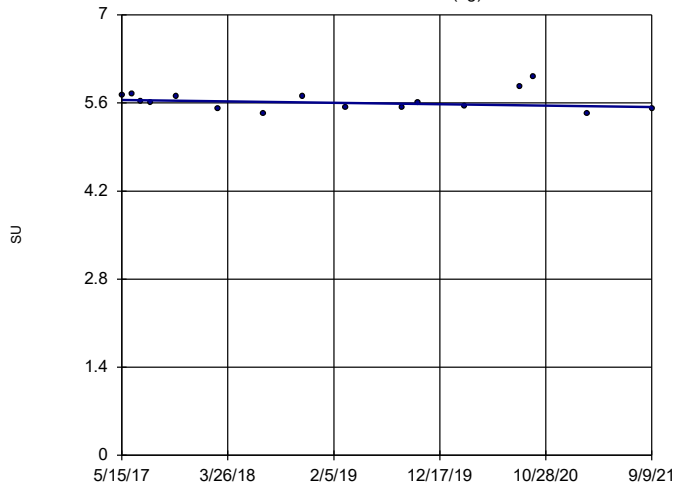
Constituent: Fluoride, total Analysis Run 12/16/2021 2:23 PM View: AP 1 Appendix III Trend Tests
Plant McDonough Client: Southern Company Data: McDonough AP

Sen's Slope Estimator
DGWA-53 (bg)



Constituent: pH, Field Analysis Run 12/16/2021 2:23 PM View: AP 1 Appendix III Trend Tests
Plant McDonough Client: Southern Company Data: McDonough AP

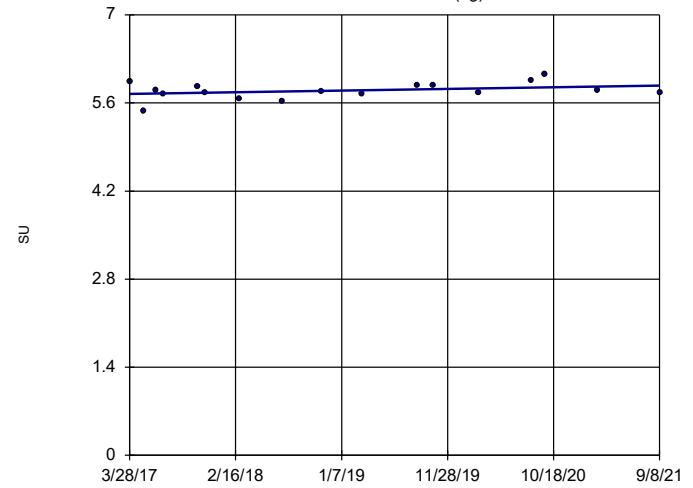
Sen's Slope Estimator
DGWA-70A (bg)



n = 16
Slope = -0.02535
units per year.
Mann-Kendall
statistic = -22
critical = -58
Trend not sig-
nificant at 99%
confidence level
($\alpha = 0.005$ per
tail).

Constituent: pH, Field Analysis Run 12/16/2021 2:23 PM View: AP 1 Appendix III Trend Tests
Plant McDonough Client: Southern Company Data: McDonough AP

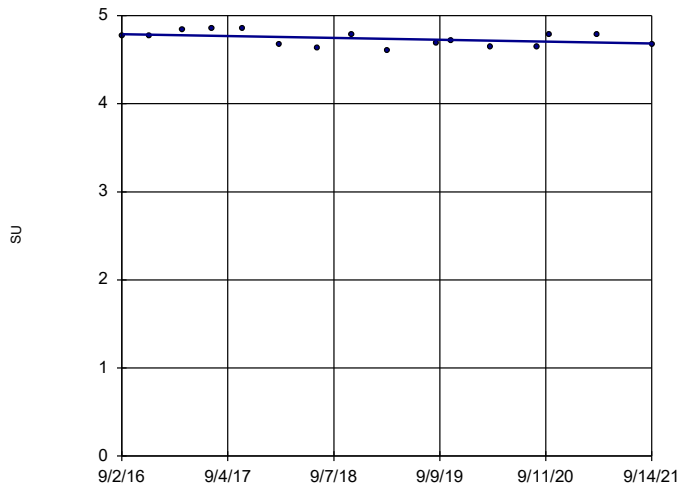
Sen's Slope Estimator
DGWA-71 (bg)



n = 17
Slope = 0.03005
units per year.
Mann-Kendall
statistic = 28
critical = 63
Trend not sig-
nificant at 99%
confidence level
($\alpha = 0.005$ per
tail).

Constituent: pH, Field Analysis Run 12/16/2021 2:23 PM View: AP 1 Appendix III Trend Tests
Plant McDonough Client: Southern Company Data: McDonough AP

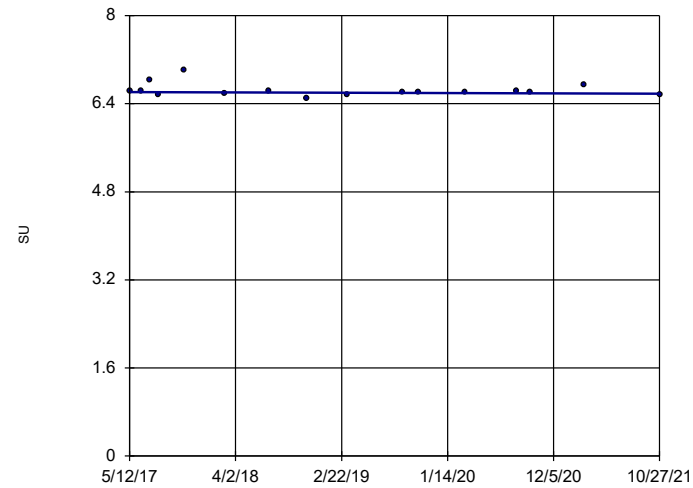
Sen's Slope Estimator
DGWC-40



n = 16
Slope = -0.02032
units per year.
Mann-Kendall
statistic = -21
critical = -58
Trend not sig-
nificant at 99%
confidence level
($\alpha = 0.005$ per
tail).

Constituent: pH, Field Analysis Run 12/16/2021 2:23 PM View: AP 1 Appendix III Trend Tests
Plant McDonough Client: Southern Company Data: McDonough AP

Sen's Slope Estimator
DGWC-68A

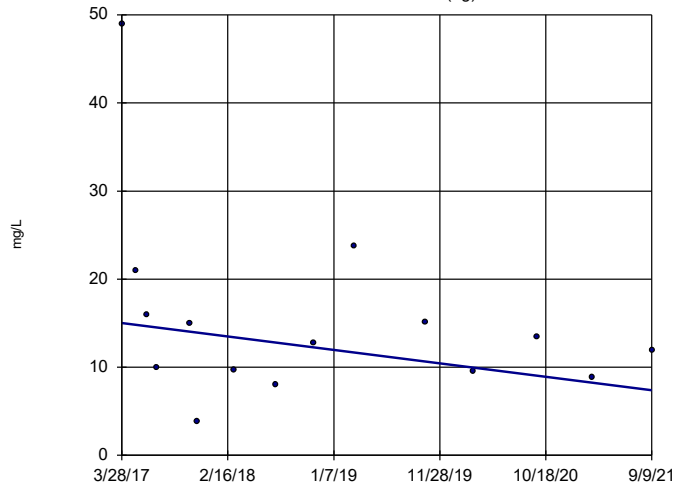


n = 16
Slope = -0.007008
units per year.
Mann-Kendall
statistic = -16
critical = -58
Trend not sig-
nificant at 99%
confidence level
($\alpha = 0.005$ per
tail).

Constituent: pH, Field Analysis Run 12/16/2021 2:23 PM View: AP 1 Appendix III Trend Tests
Plant McDonough Client: Southern Company Data: McDonough AP

Sen's Slope Estimator

DGWA-53 (bg)



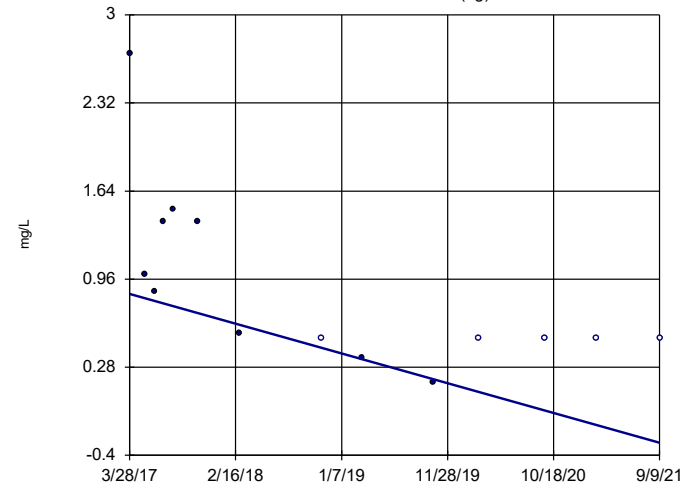
n = 15
 Slope = -1.708
 units per year.
 Mann-Kendall
 statistic = -31
 critical = -53
 Trend not sig-
 nificant at 99%
 confidence level
 ($\alpha = 0.005$ per
 tail).

Constituent: Sulfate as SO4 Analysis Run 12/16/2021 2:23 PM View: AP 1 Appendix III Trend Tests
 Plant McDonough Client: Southern Company Data: McDonough AP

Hollow symbols indicate censored values.

Sen's Slope Estimator

DGWA-70A (bg)

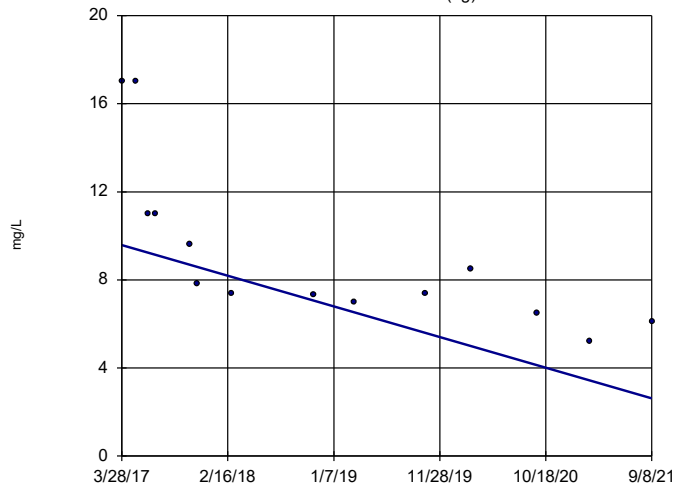


n = 14
 Slope = -0.2582
 units per year.
 Mann-Kendall
 statistic = -50
 critical = -48
 Decreasing trend
 significant at 99%
 confidence level
 ($\alpha = 0.005$ per
 tail).

Constituent: Sulfate as SO4 Analysis Run 12/16/2021 2:23 PM View: AP 1 Appendix III Trend Tests
 Plant McDonough Client: Southern Company Data: McDonough AP

Sen's Slope Estimator

DGWA-71 (bg)

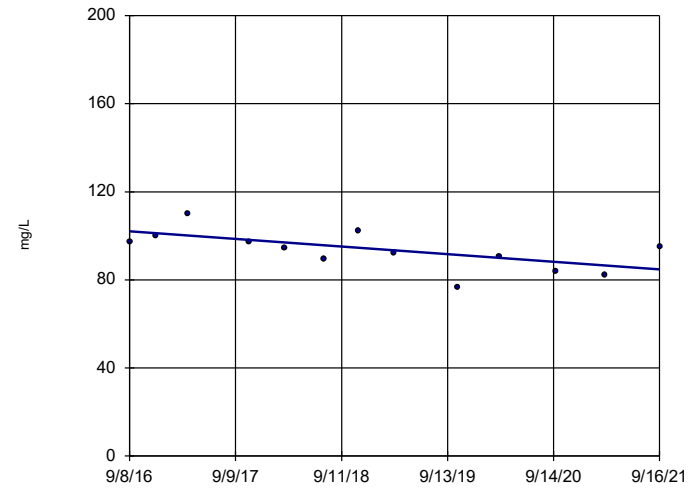


n = 14
 Slope = -1.564
 units per year.
 Mann-Kendall
 statistic = -72
 critical = -48
 Decreasing trend
 significant at 99%
 confidence level
 ($\alpha = 0.005$ per
 tail).

Constituent: Sulfate as SO4 Analysis Run 12/16/2021 2:23 PM View: AP 1 Appendix III Trend Tests
 Plant McDonough Client: Southern Company Data: McDonough AP

Sen's Slope Estimator

DGWC-37

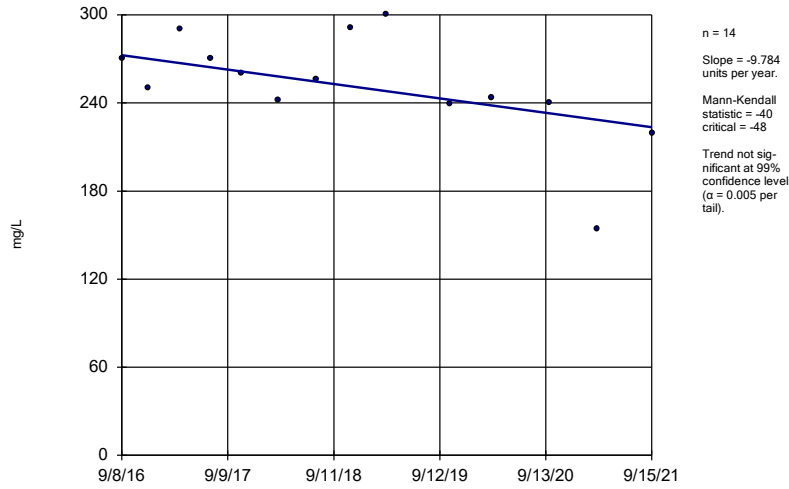


n = 13
 Slope = -3.418
 units per year.
 Mann-Kendall
 statistic = -37
 critical = -43
 Trend not sig-
 nificant at 99%
 confidence level
 ($\alpha = 0.005$ per
 tail).

Constituent: Sulfate as SO4 Analysis Run 12/16/2021 2:23 PM View: AP 1 Appendix III Trend Tests
 Plant McDonough Client: Southern Company Data: McDonough AP

Sen's Slope Estimator

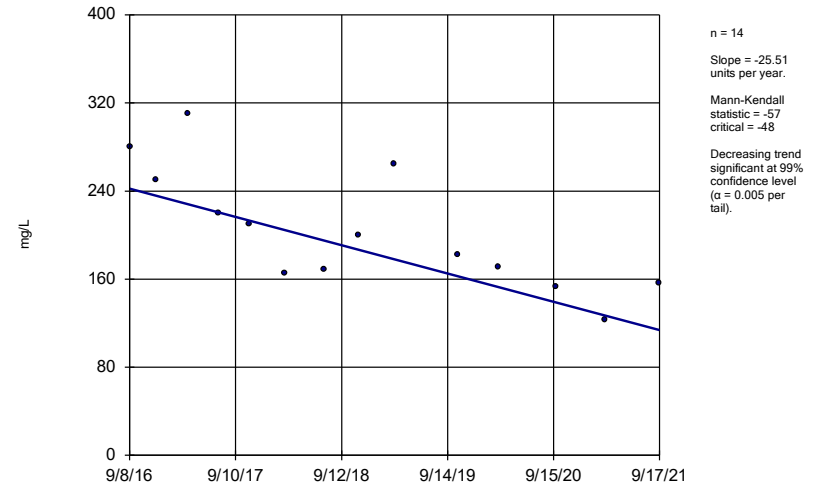
DGWC-38



Constituent: Sulfate as SO4 Analysis Run 12/16/2021 2:23 PM View: AP 1 Appendix III Trend Tests
Plant McDonough Client: Southern Company Data: McDonough AP

Sen's Slope Estimator

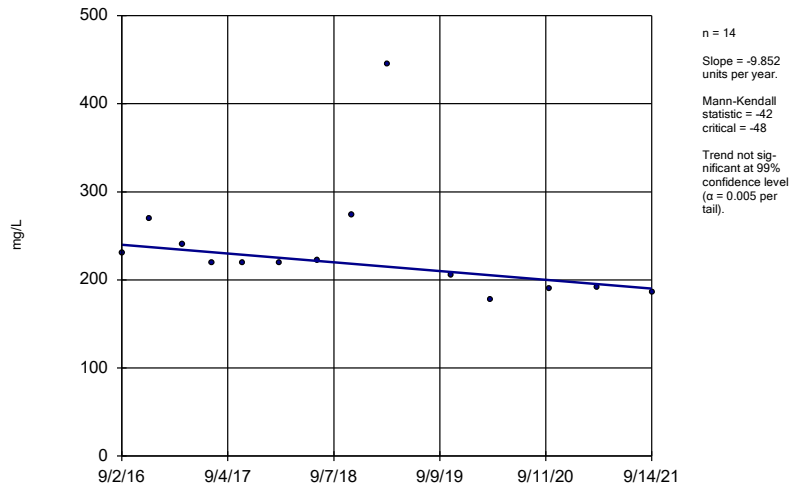
DGWC-39



Constituent: Sulfate as SO4 Analysis Run 12/16/2021 2:23 PM View: AP 1 Appendix III Trend Tests
Plant McDonough Client: Southern Company Data: McDonough AP

Sen's Slope Estimator

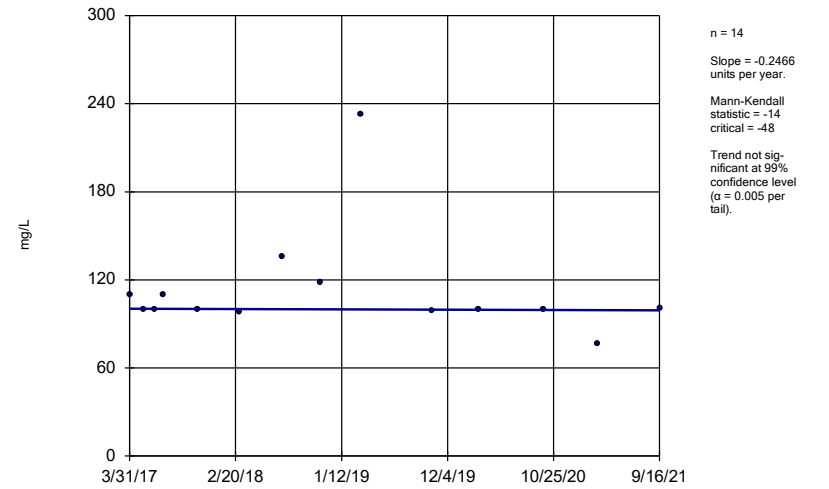
DGWC-40



Constituent: Sulfate as SO4 Analysis Run 12/16/2021 2:23 PM View: AP 1 Appendix III Trend Tests
Plant McDonough Client: Southern Company Data: McDonough AP

Sen's Slope Estimator

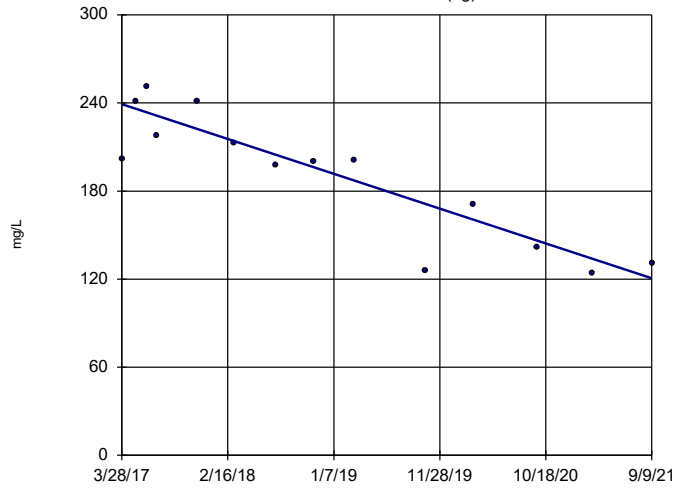
DGWC-67



Constituent: Sulfate as SO4 Analysis Run 12/16/2021 2:23 PM View: AP 1 Appendix III Trend Tests
Plant McDonough Client: Southern Company Data: McDonough AP

Sen's Slope Estimator

DGWA-53 (bg)

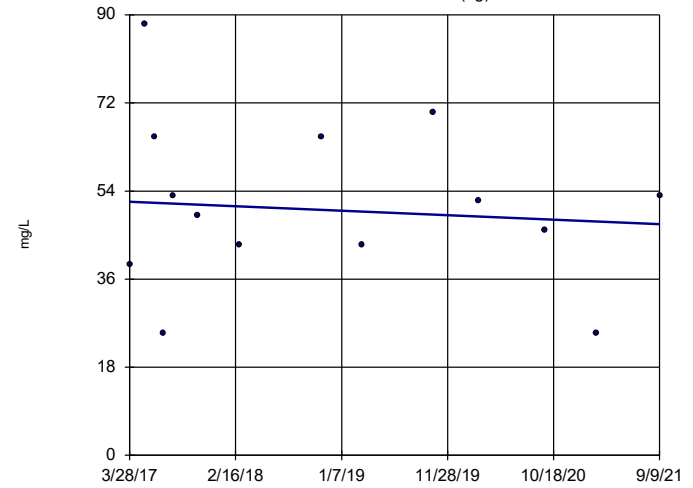


n = 14
 Slope = -26.59 units per year.
 Mann-Kendall statistic = -62
 critical = -48
 Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Total Dissolved Solids [TDS] Analysis Run 12/16/2021 2:23 PM View: AP 1 Appendix III Tren
 Plant McDonough Client: Southern Company Data: McDonough AP

Sen's Slope Estimator

DGWA-70A (bg)

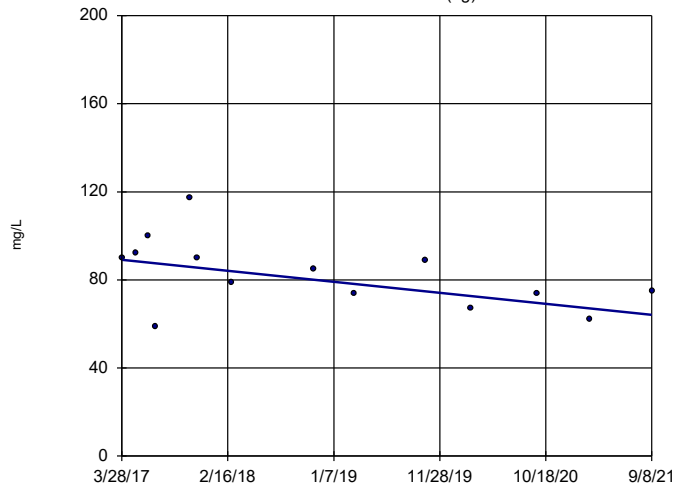


n = 14
 Slope = -1.029 units per year.
 Mann-Kendall statistic = -7
 critical = -48
 Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Total Dissolved Solids [TDS] Analysis Run 12/16/2021 2:23 PM View: AP 1 Appendix III Tren
 Plant McDonough Client: Southern Company Data: McDonough AP

Sen's Slope Estimator

DGWA-71 (bg)

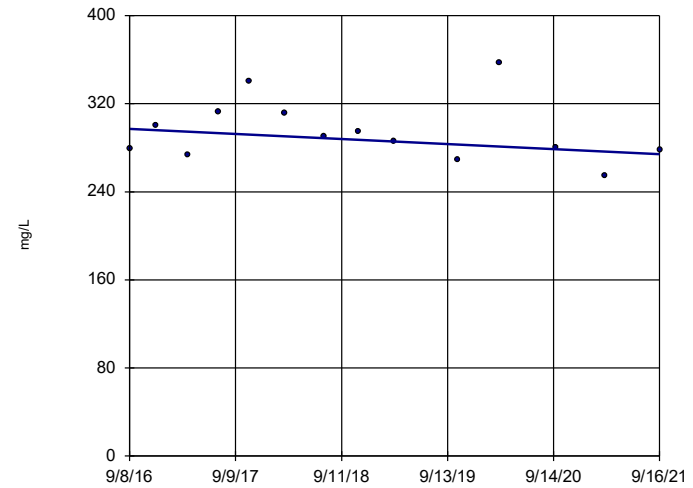


n = 14
 Slope = -5.605 units per year.
 Mann-Kendall statistic = -39
 critical = -48
 Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Total Dissolved Solids [TDS] Analysis Run 12/16/2021 2:23 PM View: AP 1 Appendix III Tren
 Plant McDonough Client: Southern Company Data: McDonough AP

Sen's Slope Estimator

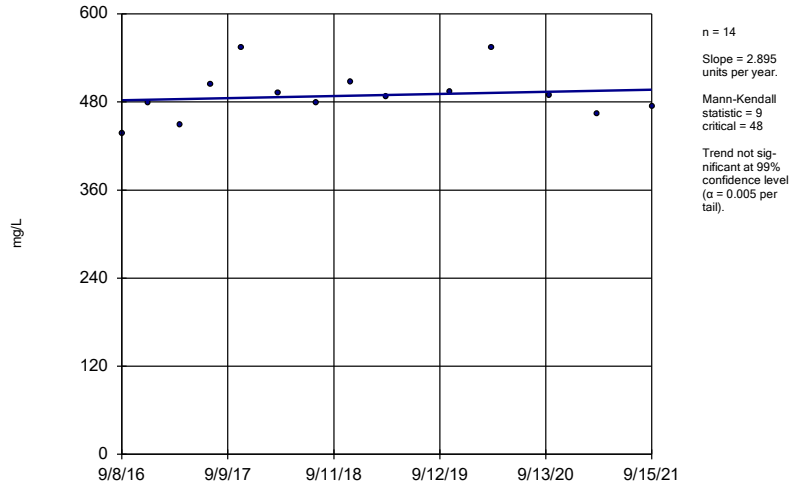
DGWC-37



n = 14
 Slope = -4.604 units per year.
 Mann-Kendall statistic = -23
 critical = -48
 Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Total Dissolved Solids [TDS] Analysis Run 12/16/2021 2:23 PM View: AP 1 Appendix III Tren
 Plant McDonough Client: Southern Company Data: McDonough AP

Sen's Slope Estimator DGWC-38



Constituent: Total Dissolved Solids [TDS] Analysis Run 12/16/2021 2:23 PM View: AP 1 Appendix III Tren
Plant McDonough Client: Southern Company Data: McDonough AP

Sen's Slope Estimator DGWC-39

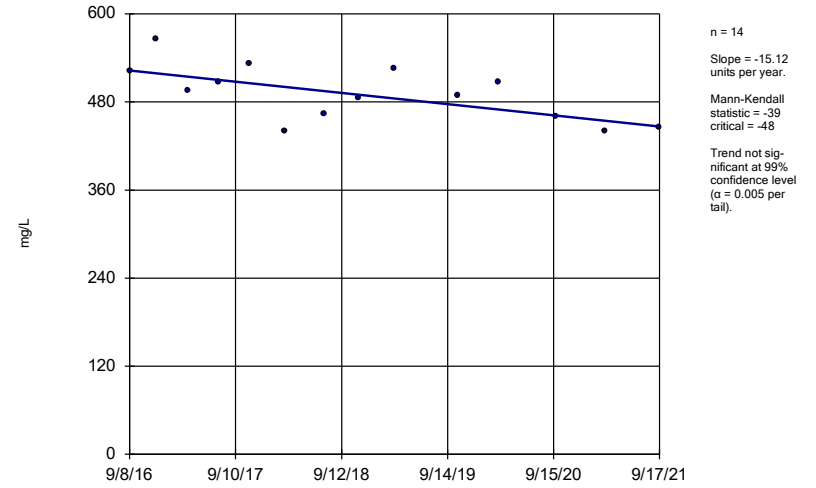


FIGURE F.

Upper Tolerance Limits Summary Table

Plant McDonough Client: Southern Company Data: McDonough AP Printed 11/8/2021, 10:17 AM

<u>Constituent</u>	<u>Well</u>	<u>Upper Lim.</u>	<u>Date</u>	<u>Observ.</u>	<u>Sig.</u>	<u>Bg N</u>	<u>Bg Mean</u>	<u>Std. Dev.</u>	<u>%NDs</u>	<u>ND Adj.</u>	<u>Transform</u>	<u>Alpha</u>	<u>Method</u>
Antimony (mg/L)	n/a	0.003	n/a	n/a	n/a	44	n/a	n/a	79.55	n/a	n/a	0.1047	NP Inter(NDs)
Arsenic (mg/L)	n/a	0.005	n/a	n/a	n/a	44	n/a	n/a	81.82	n/a	n/a	0.1047	NP Inter(NDs)
Barium (mg/L)	n/a	0.19	n/a	n/a	n/a	44	n/a	n/a	0	n/a	n/a	0.1047	NP Inter(normality)
Beryllium (mg/L)	n/a	0.0009	n/a	n/a	n/a	45	n/a	n/a	62.22	n/a	n/a	0.09944	NP Inter(NDs)
Cadmium (mg/L)	n/a	0.0005	n/a	n/a	n/a	44	n/a	n/a	93.18	n/a	n/a	0.1047	NP Inter(NDs)
Chromium (mg/L)	n/a	0.005	n/a	n/a	n/a	43	n/a	n/a	60.47	n/a	n/a	0.1102	NP Inter(NDs)
Cobalt (mg/L)	n/a	0.0322	n/a	n/a	n/a	44	n/a	n/a	36.36	n/a	n/a	0.1047	NP Inter(normality)
Combined Radium 226 + 228 (pCi/L)	n/a	5.605	n/a	n/a	n/a	46	1.041	0.3523	0	None	x ^(1/3)	0.05	Inter
Fluoride, total (mg/L)	n/a	0.42	n/a	n/a	n/a	48	n/a	n/a	52.08	n/a	n/a	0.08526	NP Inter(NDs)
Lead (mg/L)	n/a	0.001	n/a	n/a	n/a	44	n/a	n/a	79.55	n/a	n/a	0.1047	NP Inter(NDs)
Lithium (mg/L)	n/a	0.03	n/a	n/a	n/a	44	n/a	n/a	36.36	n/a	n/a	0.1047	NP Inter(normality)
Mercury (mg/L)	n/a	0.0002	n/a	n/a	n/a	44	n/a	n/a	86.36	n/a	n/a	0.1047	NP Inter(NDs)
Molybdenum (mg/L)	n/a	0.0409	n/a	n/a	n/a	44	n/a	n/a	63.64	n/a	n/a	0.1047	NP Inter(NDs)
Selenium (mg/L)	n/a	0.005	n/a	n/a	n/a	44	n/a	n/a	100	n/a	n/a	0.1047	NP Inter(NDs)
Thallium (mg/L)	n/a	0.001	n/a	n/a	n/a	44	n/a	n/a	95.45	n/a	n/a	0.1047	NP Inter(NDs)

FIGURE G.

PLANT MCDONOUGH ASH POND 1 GWPS TABLE - FEDERAL				
Constituent Name	MCL	CCR-Rule Specified	Background Limit	GWPS
Antimony, Total (mg/L)	0.006		0.003	0.006
Arsenic, Total (mg/L)	0.01		0.005	0.01
Barium, Total (mg/L)	2		0.19	2
Beryllium, Total (mg/L)	0.004		0.0009	0.004
Cadmium, Total (mg/L)	0.005		0.0005	0.005
Chromium, Total (mg/L)	0.1		0.005	0.1
Cobalt, Total (mg/L)		0.006	0.032	0.032
Combined Radium, Total (pCi/L)	5		5.61	5.61
Fluoride, Total (mg/L)	4		0.42	4
Lead, Total (mg/L)		0.015	0.001	0.015
Lithium, Total (mg/L)		0.04	0.03	0.04
Mercury, Total (mg/L)	0.002		0.0002	0.002
Molybdenum, Total (mg/L)		0.1	0.041	0.1
Selenium, Total (mg/L)	0.05		0.005	0.05
Thallium, Total (mg/L)	0.002		0.001	0.002

**Highlighted cells indicated Background is higher than MCLs or CCR-Rule*

**MCL = Maximum Contaminant Level*

**CCR = Coal Combustion Residual*

**GWPS = Groundwater Protection Standard*

FIGURE H.

PLANT MCDONOUGH ASH POND 1 GWPS TABLE - STATE				
Constituent Name	MCL	CCR-Rule Specified	Background Limit	GWPS
Antimony, Total (mg/L)	0.006		0.003	0.006
Arsenic, Total (mg/L)	0.01		0.005	0.01
Barium, Total (mg/L)	2		0.19	2
Beryllium, Total (mg/L)	0.004		0.0009	0.004
Cadmium, Total (mg/L)	0.005		0.0005	0.005
Chromium, Total (mg/L)	0.1		0.005	0.1
Cobalt, Total (mg/L)		0.006	0.032	0.032
Combined Radium, Total (pCi/L)	5		5.61	5.61
Fluoride, Total (mg/L)	4		0.42	4
Lead, Total (mg/L)		0.015	0.001	0.001
Lithium, Total (mg/L)		0.04	0.03	0.03
Mercury, Total (mg/L)	0.002		0.0002	0.002
Molybdenum, Total (mg/L)		0.1	0.041	0.041
Selenium, Total (mg/L)	0.05		0.005	0.05
Thallium, Total (mg/L)	0.002		0.001	0.002

**Highlighted cells indicated Background is higher than MCLs or CCR-Rule*

**MCL = Maximum Contaminant Level*

**CCR = Coal Combustion Residual*

**GWPS = Groundwater Protection Standard*

FIGURE I.

Federal Confidence Intervals - Significant Results

Plant McDonough Client: Southern Company Data: McDonough AP Printed 12/16/2021, 2:29 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig. N	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Arsenic (mg/L)	DGWC-69	0.0386	0.01205	0.01	Yes 17	0.03366	0.04147	0	None	In(x)	0.01	Param.
Cobalt (mg/L)	DGWC-40	0.04576	0.03776	0.032	Yes 15	0.04176	0.005898	0	None	No	0.01	Param.
Molybdenum (mg/L)	DGWC-68A	0.2226	0.1942	0.1	Yes 15	0.2089	0.02252	0	None	In(x)	0.01	Param.

Federal Confidence Intervals - All Results

Plant McDonough Client: Southern Company Data: McDonough AP Printed 12/16/2021, 2:29 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Antimony (mg/L)	B-100	0.001954	0.001046	0.006	No	4	0.00225	0.0008813	50	Kaplan-Meier	No	0.01	Param.
Antimony (mg/L)	B-62	0.003	0.00046	0.006	No	7	0.002637	0.00096	85.71	Kaplan-Meier	No	0.008	NP (NDs)
Antimony (mg/L)	DGWC-40	0.003	0.00033	0.006	No	14	0.002809	0.0007136	92.86	None	No	0.01	NP (NDs)
Antimony (mg/L)	DGWC-67	0.003	0.0023	0.006	No	14	0.002607	0.000874	78.57	None	No	0.01	NP (NDs)
Antimony (mg/L)	DGWC-68A	0.003	0.0008	0.006	No	14	0.002651	0.000891	85.71	None	No	0.01	NP (NDs)
Antimony (mg/L)	DGWC-69	0.003	0.0019	0.006	No	15	0.002693	0.0006829	80	None	No	0.01	NP (NDs)
Arsenic (mg/L)	DGWC-37	0.005	0.0019	0.01	No	15	0.004793	0.0008004	93.33	None	No	0.01	NP (NDs)
Arsenic (mg/L)	DGWC-38	0.005	0.0005	0.01	No	15	0.0047	0.001162	93.33	None	No	0.01	NP (NDs)
Arsenic (mg/L)	DGWC-39	0.005	0.0007	0.01	No	15	0.003019	0.002198	53.33	None	No	0.01	NP (NDs)
Arsenic (mg/L)	DGWC-40	0.005	0.0011	0.01	No	15	0.004157	0.001749	80	None	No	0.01	NP (NDs)
Arsenic (mg/L)	DGWC-67	0.005	0.0008	0.01	No	15	0.004415	0.001546	86.67	None	No	0.01	NP (NDs)
Arsenic (mg/L)	DGWC-68A	0.005	0.0016	0.01	No	15	0.004773	0.0008779	93.33	None	No	0.01	NP (NDs)
Arsenic (mg/L)	DGWC-69	0.0386	0.01205	0.01	Yes	17	0.03366	0.04147	0	None	ln(x)	0.01	Param.
Barium (mg/L)	B-100	0.022	0.015	2	No	4	0.02	0.003367	0	None	No	0.0625	NP (selected)
Barium (mg/L)	B-62	0.02758	0.01985	2	No	7	0.02371	0.003251	0	None	No	0.01	Param.
Barium (mg/L)	DGWC-37	0.1106	0.08922	2	No	15	0.09993	0.0158	0	None	No	0.01	Param.
Barium (mg/L)	DGWC-38	0.0336	0.032	2	No	15	0.03288	0.0009143	0	None	No	0.01	NP (normality)
Barium (mg/L)	DGWC-39	0.09601	0.08399	2	No	15	0.09	0.008868	0	None	No	0.01	Param.
Barium (mg/L)	DGWC-40	0.019	0.0168	2	No	15	0.01805	0.002624	0	None	No	0.01	NP (normality)
Barium (mg/L)	DGWC-67	0.1121	0.1001	2	No	15	0.1061	0.008863	0	None	No	0.01	Param.
Barium (mg/L)	DGWC-68A	0.09023	0.08687	2	No	15	0.08855	0.00248	0	None	No	0.01	Param.
Barium (mg/L)	DGWC-69	0.1021	0.06835	2	No	16	0.08523	0.02594	0	None	No	0.01	Param.
Beryllium (mg/L)	B-100	0.0006113	0.0002587	0.004	No	4	0.000435	0.00007767	0	None	No	0.01	Param.
Beryllium (mg/L)	B-62	0.0005	0.000078	0.004	No	8	0.0002085	0.000181	25	None	No	0.004	NP (normality)
Beryllium (mg/L)	DGWC-37	0.0005	0.000086	0.004	No	15	0.0003602	0.0002048	66.67	None	No	0.01	NP (NDs)
Beryllium (mg/L)	DGWC-38	0.0005	0.000058	0.004	No	15	0.0004705	0.0001141	93.33	None	No	0.01	NP (NDs)
Beryllium (mg/L)	DGWC-40	0.003315	0.002898	0.004	No	15	0.003107	0.0003081	6.667	None	No	0.01	Param.
Beryllium (mg/L)	DGWC-68A	0.0005	0.000084	0.004	No	15	0.000443	0.0001505	86.67	None	No	0.01	NP (NDs)
Beryllium (mg/L)	DGWC-69	0.0005	0.000061	0.004	No	16	0.0003361	0.0002186	62.5	None	No	0.01	NP (NDs)
Cadmium (mg/L)	B-100	0.00059	0.00027	0.005	No	4	0.000355	0.000157	0	None	No	0.0625	NP (normality)
Cadmium (mg/L)	DGWC-37	0.0005	0.00013	0.005	No	15	0.0003867	0.0001705	66.67	None	No	0.01	NP (NDs)
Cadmium (mg/L)	DGWC-38	0.0005	0.00017	0.005	No	15	0.00034	0.0002553	20	None	No	0.01	NP (normality)
Cadmium (mg/L)	DGWC-40	0.0008845	0.0007248	0.005	No	15	0.0008047	0.0001178	13.33	None	No	0.01	Param.
Cadmium (mg/L)	DGWC-67	0.00053	0.00018	0.005	No	15	0.000416	0.0001495	66.67	None	No	0.01	NP (NDs)
Cadmium (mg/L)	DGWC-68A	0.001	0.00017	0.005	No	15	0.000388	0.0002332	53.33	None	No	0.01	NP (NDs)
Cadmium (mg/L)	DGWC-69	0.0005	0.0002	0.005	No	16	0.0004169	0.0001502	75	None	No	0.01	NP (NDs)
Chromium (mg/L)	B-100	0.001223	0.0003828	0.1	No	4	0.002877	0.002456	50	Kaplan-Meier	sqrt(x)	0.01	Param.
Chromium (mg/L)	B-62	0.005	0.00098	0.1	No	7	0.004426	0.001519	85.71	Kaplan-Meier	No	0.008	NP (NDs)
Chromium (mg/L)	DGWC-37	0.005	0.0007	0.1	No	15	0.004419	0.001534	86.67	None	No	0.01	NP (NDs)
Chromium (mg/L)	DGWC-38	0.005	0.00092	0.1	No	15	0.004124	0.001816	80	None	No	0.01	NP (NDs)
Chromium (mg/L)	DGWC-40	0.005	0.00061	0.1	No	15	0.002267	0.002034	33.33	None	No	0.01	NP (normality)
Chromium (mg/L)	DGWC-67	0.005	0.00088	0.1	No	15	0.003899	0.001899	73.33	None	No	0.01	NP (NDs)
Chromium (mg/L)	DGWC-68A	0.005	0.0005	0.1	No	15	0.0047	0.001162	93.33	None	No	0.01	NP (NDs)
Chromium (mg/L)	DGWC-69	0.005	0.0011	0.1	No	16	0.003981	0.001829	75	None	No	0.01	NP (NDs)
Cobalt (mg/L)	B-100	0.087	0.029	0.032	No	6	0.058	0.02804	0	None	No	0.0155	NP (selected)
Cobalt (mg/L)	B-62	0.005	0.0003	0.032	No	7	0.003659	0.002291	71.43	None	No	0.008	NP (NDs)
Cobalt (mg/L)	DGWC-37	0.005	0.0005	0.032	No	15	0.004073	0.001919	80	None	No	0.01	NP (NDs)
Cobalt (mg/L)	DGWC-38	0.0017	0.0015	0.032	No	15	0.002353	0.002296	13.33	None	No	0.01	NP (normality)
Cobalt (mg/L)	DGWC-39	0.007286	0.005895	0.032	No	15	0.006633	0.001136	13.33	None	ln(x)	0.01	Param.
Cobalt (mg/L)	DGWC-40	0.04576	0.03776	0.032	Yes	15	0.04176	0.005898	0	None	No	0.01	Param.
Cobalt (mg/L)	DGWC-67	0.003862	0.001505	0.032	No	15	0.003087	0.002508	13.33	None	ln(x)	0.01	Param.
Cobalt (mg/L)	DGWC-68A	0.005	0.0015	0.032	No	15	0.004153	0.00177	80	None	No	0.01	NP (NDs)
Cobalt (mg/L)	DGWC-69	0.005	0.0016	0.032	No	16	0.003812	0.001698	62.5	None	No	0.01	NP (NDs)

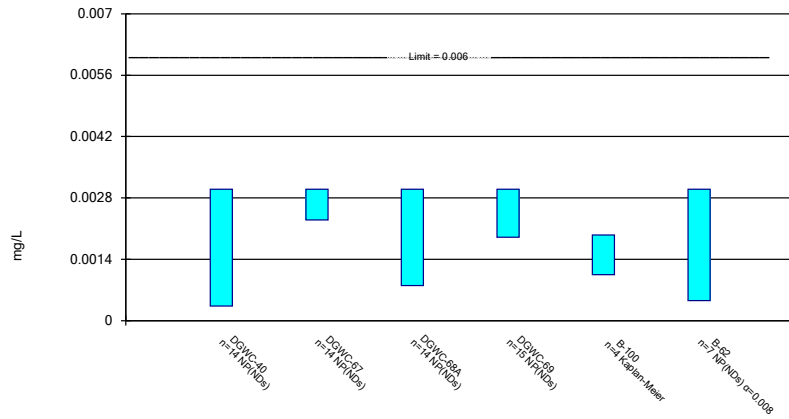
Federal Confidence Intervals - All Results

Plant McDonough Client: Southern Company Data: McDonough AP Printed 12/16/2021, 2:29 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Combined Radium 226 + 228 (pCi/L)	B-100	1.4	0.168	5.61	No	4	0.7853	0.5031	0	None	No	0.0625	NP (selected)
Combined Radium 226 + 228 (pCi/L)	B-62	2.02	1.173	5.61	No	6	1.597	0.3082	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	DGWC-37	1.115	0.5395	5.61	No	15	0.8273	0.4247	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	DGWC-38	1.193	0.3928	5.61	No	15	0.7931	0.5907	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	DGWC-39	1.353	0.6709	5.61	No	15	1.012	0.5031	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	DGWC-40	1.546	0.6118	5.61	No	15	1.079	0.6893	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	DGWC-67	0.996	0.4419	5.61	No	15	0.7189	0.4089	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	DGWC-68A	1.426	0.5976	5.61	No	15	1.012	0.6109	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	DGWC-69	1.844	1.178	5.61	No	16	1.511	0.5122	0	None	No	0.01	Param.
Fluoride, total (mg/L)	B-62	0.3546	0.06003	4	No	6	0.1855	0.1295	0	None	x^(1/3)	0.01	Param.
Fluoride, total (mg/L)	DGWC-37	0.21	0.054	4	No	16	0.1014	0.07777	6.25	None	No	0.01	NP (normality)
Fluoride, total (mg/L)	DGWC-38	0.23	0.057	4	No	16	0.1214	0.1131	12.5	None	No	0.01	NP (normality)
Fluoride, total (mg/L)	DGWC-39	0.17	0.083	4	No	16	0.1576	0.1194	6.25	None	No	0.01	NP (normality)
Fluoride, total (mg/L)	DGWC-40	0.3219	0.1358	4	No	16	0.2409	0.1592	6.25	None	sqrt(x)	0.01	Param.
Fluoride, total (mg/L)	DGWC-67	0.07	0.038	4	No	16	0.08794	0.1217	50	None	No	0.01	NP (normality)
Fluoride, total (mg/L)	DGWC-68A	0.23	0.076	4	No	16	0.1544	0.1295	6.25	None	No	0.01	NP (normality)
Fluoride, total (mg/L)	DGWC-69	0.1805	0.09325	4	No	17	0.1369	0.06963	5.882	None	No	0.01	Param.
Lead (mg/L)	B-100	0.0003036	0.00005528	0.015	No	4	0.0003695	0.0004235	25	Kaplan-Meier	sqrt(x)	0.01	Param.
Lead (mg/L)	DGWC-37	0.0014	0.000061	0.015	No	15	0.0009641	0.0002702	86.67	None	No	0.01	NP (NDs)
Lead (mg/L)	DGWC-38	0.001	0.0001	0.015	No	15	0.000701	0.0004381	66.67	None	No	0.01	NP (NDs)
Lead (mg/L)	DGWC-39	0.001	0.00022	0.015	No	15	0.0008867	0.0003003	86.67	None	No	0.01	NP (NDs)
Lead (mg/L)	DGWC-40	0.001	0.00007	0.015	No	15	0.0005283	0.0004602	46.67	None	No	0.01	NP (normality)
Lead (mg/L)	DGWC-67	0.001	0.00009	0.015	No	15	0.0007629	0.0004094	73.33	None	No	0.01	NP (NDs)
Lead (mg/L)	DGWC-68A	0.001	0.00035	0.015	No	15	0.0008945	0.0002836	86.67	None	No	0.01	NP (NDs)
Lead (mg/L)	DGWC-69	0.001	0.00009	0.015	No	16	0.0006631	0.0004498	62.5	None	No	0.01	NP (NDs)
Lithium (mg/L)	B-100	0.003519	0.0007815	0.04	No	4	0.00215	0.0006028	0	None	No	0.01	Param.
Lithium (mg/L)	B-62	0.03	0.0078	0.04	No	7	0.01154	0.008158	14.29	None	No	0.008	NP (normality)
Lithium (mg/L)	DGWC-37	0.03	0.0021	0.04	No	15	0.009707	0.01267	26.67	None	No	0.01	NP (normality)
Lithium (mg/L)	DGWC-38	0.0035	0.0029	0.04	No	15	0.005	0.00692	6.667	None	No	0.01	NP (normality)
Lithium (mg/L)	DGWC-40	0.003	0.0022	0.04	No	15	0.00602	0.009739	13.33	None	No	0.01	NP (normality)
Lithium (mg/L)	DGWC-67	0.0052	0.0043	0.04	No	15	0.00634	0.006555	6.667	None	No	0.01	NP (normality)
Lithium (mg/L)	DGWC-68A	0.03	0.0016	0.04	No	15	0.02616	0.01013	86.67	None	No	0.01	NP (NDs)
Lithium (mg/L)	DGWC-69	0.0032	0.0024	0.04	No	16	0.004525	0.006804	6.25	None	No	0.01	NP (normality)
Mercury (mg/L)	DGWC-37	0.0002	0.000091	0.002	No	14	0.0001711	0.00005824	78.57	None	No	0.01	NP (NDs)
Mercury (mg/L)	DGWC-38	0.0002	0.000085	0.002	No	14	0.0001711	0.00005818	78.57	None	No	0.01	NP (NDs)
Mercury (mg/L)	DGWC-39	0.0002	0.000059	0.002	No	14	0.0001899	0.00003768	92.86	None	No	0.01	NP (NDs)
Mercury (mg/L)	DGWC-40	0.0002	0.00009	0.002	No	14	0.0001699	0.00006064	78.57	None	No	0.01	NP (NDs)
Mercury (mg/L)	DGWC-67	0.0002	0.00007	0.002	No	14	0.0001907	0.00003474	92.86	None	No	0.01	NP (NDs)
Mercury (mg/L)	DGWC-68A	0.0002	0.00007	0.002	No	14	0.0001907	0.00003474	92.86	None	No	0.01	NP (NDs)
Mercury (mg/L)	DGWC-69	0.0002	0.00007	0.002	No	15	0.0001913	0.00003357	93.33	None	No	0.01	NP (NDs)
Molybdenum (mg/L)	DGWC-38	0.01	0.00099	0.1	No	15	0.005219	0.004629	46.67	None	No	0.01	NP (normality)
Molybdenum (mg/L)	DGWC-68A	0.2226	0.1942	0.1	Yes	15	0.2089	0.02252	0	None	ln(x)	0.01	Param.
Molybdenum (mg/L)	DGWC-69	0.01236	0.006699	0.1	No	16	0.01023	0.005862	6.25	None	ln(x)	0.01	Param.
Selenium (mg/L)	B-100	0.005	0.0019	0.05	No	4	0.004225	0.00155	75	Kaplan-Meier	No	0.0625	NP (NDs)
Selenium (mg/L)	DGWC-38	0.005	0.0019	0.05	No	15	0.004793	0.0008004	93.33	None	No	0.01	NP (NDs)
Selenium (mg/L)	DGWC-40	0.003517	0.001857	0.05	No	15	0.003607	0.002356	20	Kaplan-Meier	x^(1/3)	0.01	Param.
Selenium (mg/L)	DGWC-67	0.005	0.0027	0.05	No	15	0.004847	0.0005939	93.33	Kaplan-Meier	No	0.01	NP (NDs)
Selenium (mg/L)	DGWC-68A	0.005	0.0017	0.05	No	15	0.00478	0.0008521	93.33	Kaplan-Meier	No	0.01	NP (NDs)
Thallium (mg/L)	DGWC-38	0.001	0.0001	0.002	No	15	0.000534	0.0004517	46.67	None	No	0.01	NP (normality)
Thallium (mg/L)	DGWC-39	0.001	0.00009	0.002	No	15	0.0006953	0.0004461	66.67	None	No	0.01	NP (NDs)
Thallium (mg/L)	DGWC-40	0.001	0.000068	0.002	No	15	0.0006885	0.0004559	66.67	None	No	0.01	NP (NDs)
Thallium (mg/L)	DGWC-68A	0.001	0.00015	0.002	No	15	0.0009433	0.0002195	93.33	None	No	0.01	NP (NDs)

Parametric and Non-Parametric (NP) Confidence Interval

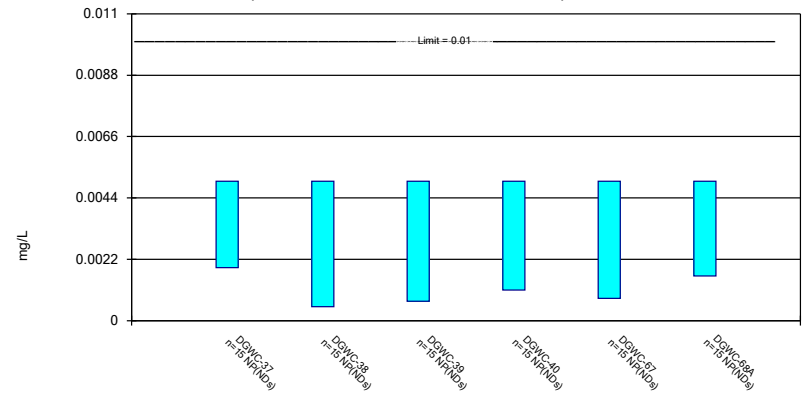
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Antimony Analysis Run 12/16/2021 2:27 PM View: AP 1 Confidence Intervals
 Plant McDonough Client: Southern Company Data: McDonough AP

Non-Parametric Confidence Interval

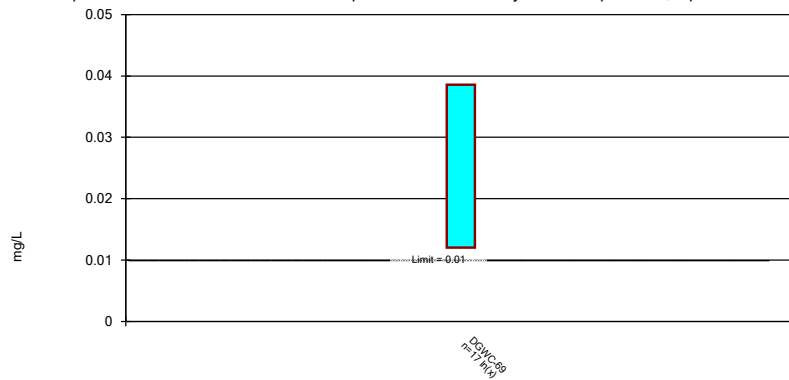
Compliance Limit is not exceeded. Per-well alpha = 0.01.



Constituent: Arsenic Analysis Run 12/16/2021 2:27 PM View: AP 1 Confidence Intervals
 Plant McDonough Client: Southern Company Data: McDonough AP

Parametric Confidence Interval

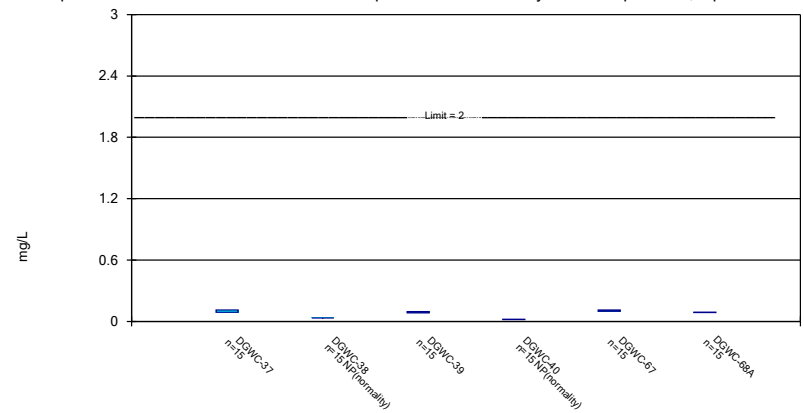
Compliance limit is exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Arsenic Analysis Run 12/16/2021 2:27 PM View: AP 1 Confidence Intervals
 Plant McDonough Client: Southern Company Data: McDonough AP

Parametric and Non-Parametric (NP) Confidence Interval

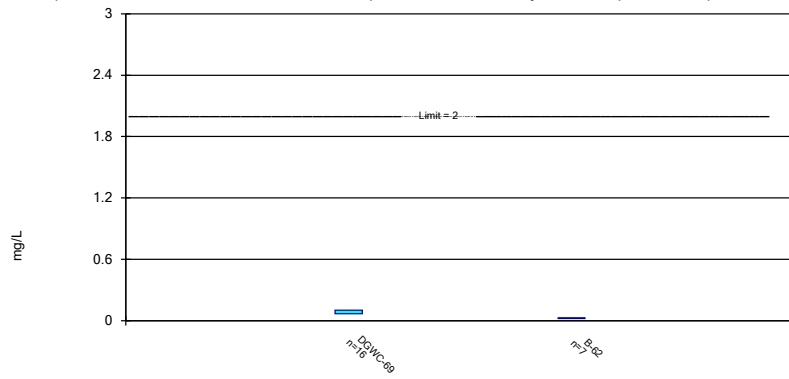
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Barium Analysis Run 12/16/2021 2:27 PM View: AP 1 Confidence Intervals
 Plant McDonough Client: Southern Company Data: McDonough AP

Parametric Confidence Interval

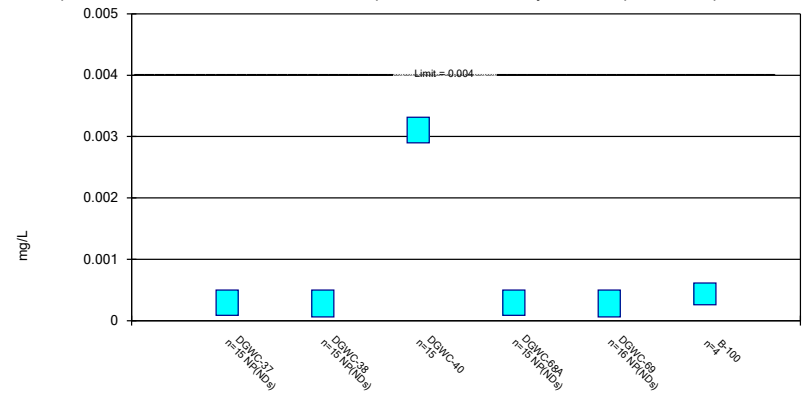
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Barium Analysis Run 12/16/2021 2:27 PM View: AP 1 Confidence Intervals
 Plant McDonough Client: Southern Company Data: McDonough AP

Parametric and Non-Parametric (NP) Confidence Interval

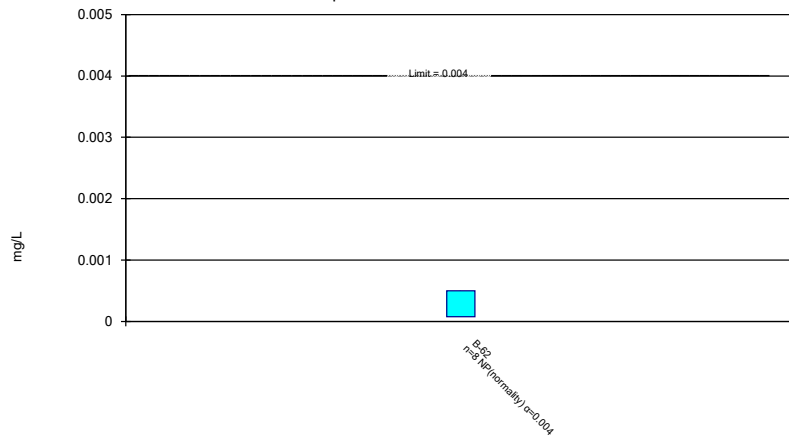
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Beryllium Analysis Run 12/16/2021 2:27 PM View: AP 1 Confidence Intervals
 Plant McDonough Client: Southern Company Data: McDonough AP

Non-Parametric Confidence Interval

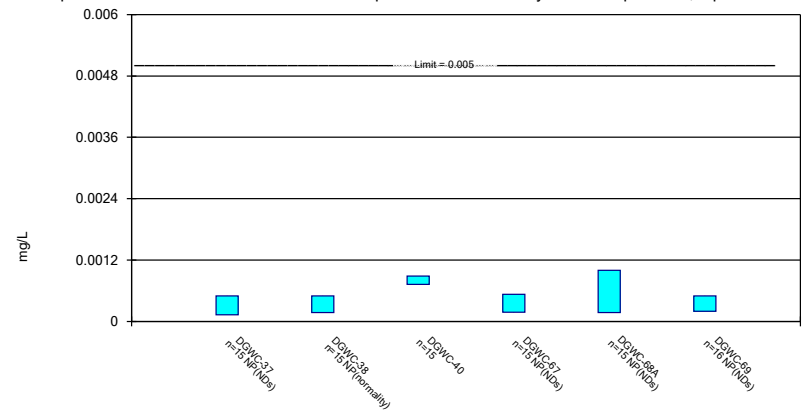
Compliance Limit is not exceeded.



Constituent: Beryllium Analysis Run 12/16/2021 2:27 PM View: AP 1 Confidence Intervals
 Plant McDonough Client: Southern Company Data: McDonough AP

Parametric and Non-Parametric (NP) Confidence Interval

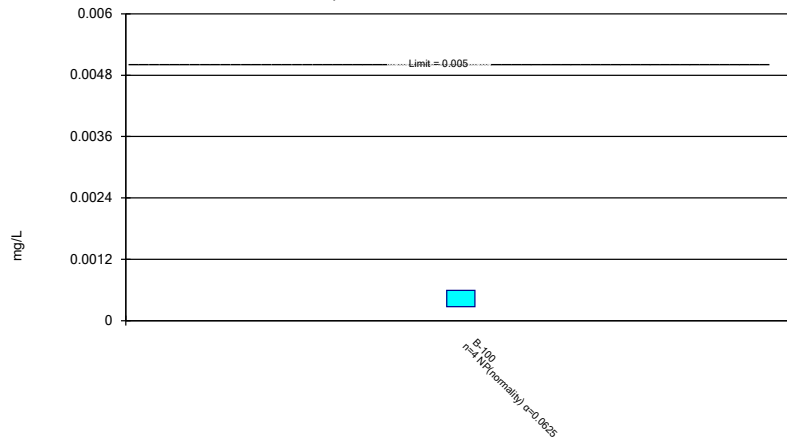
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Cadmium Analysis Run 12/16/2021 2:27 PM View: AP 1 Confidence Intervals
 Plant McDonough Client: Southern Company Data: McDonough AP

Non-Parametric Confidence Interval

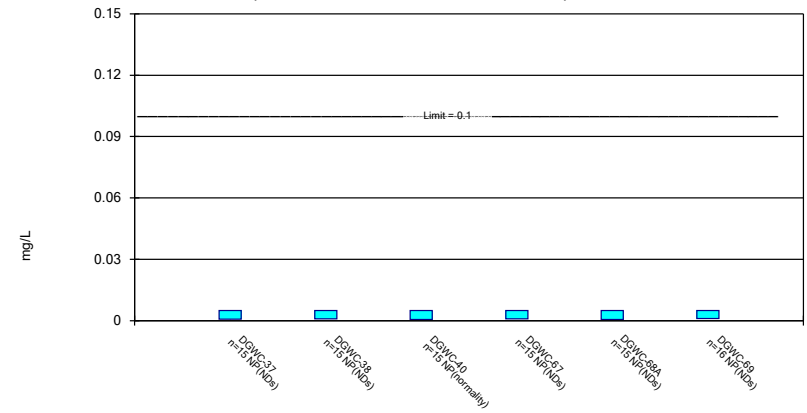
Compliance Limit is not exceeded.



Constituent: Cadmium Analysis Run 12/16/2021 2:27 PM View: AP 1 Confidence Intervals
 Plant McDonough Client: Southern Company Data: McDonough AP

Non-Parametric Confidence Interval

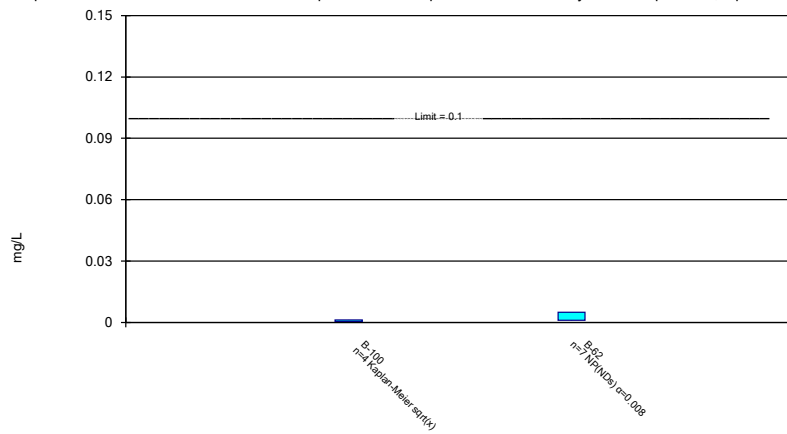
Compliance Limit is not exceeded. Per-well alpha = 0.01.



Constituent: Chromium Analysis Run 12/16/2021 2:27 PM View: AP 1 Confidence Intervals
 Plant McDonough Client: Southern Company Data: McDonough AP

Parametric and Non-Parametric (NP) Confidence Interval

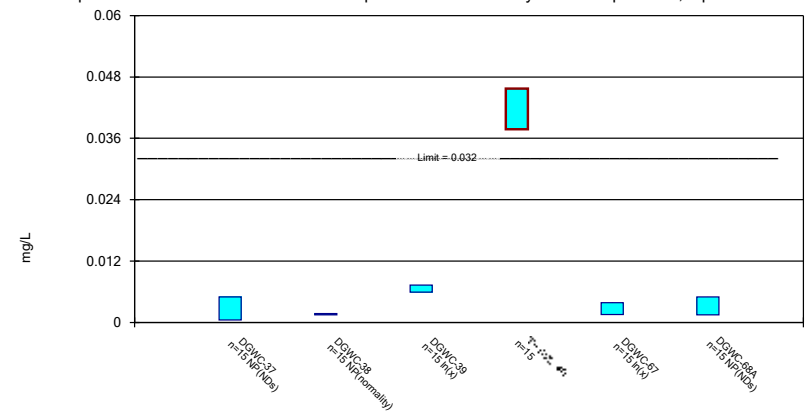
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Chromium Analysis Run 12/16/2021 2:27 PM View: AP 1 Confidence Intervals
 Plant McDonough Client: Southern Company Data: McDonough AP

Parametric and Non-Parametric (NP) Confidence Interval

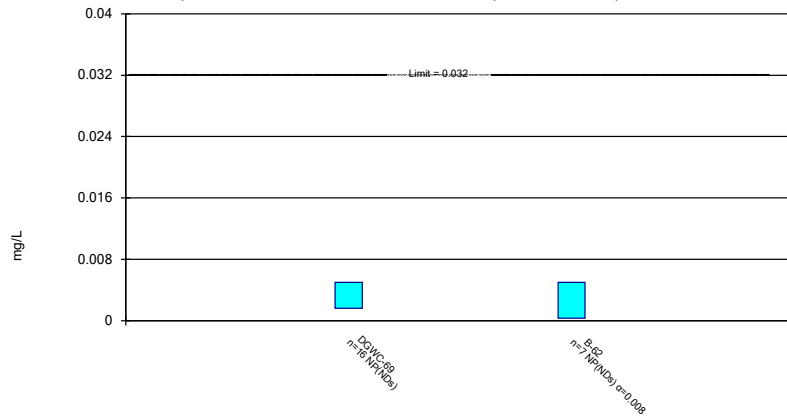
Compliance limit is exceeded.* Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Cobalt Analysis Run 12/16/2021 2:27 PM View: AP 1 Confidence Intervals
 Plant McDonough Client: Southern Company Data: McDonough AP

Non-Parametric Confidence Interval

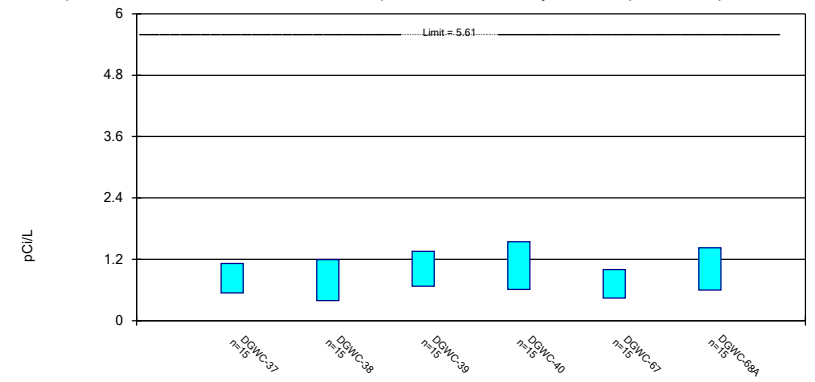
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted.



Constituent: Cobalt Analysis Run 12/16/2021 2:27 PM View: AP 1 Confidence Intervals
Plant McDonough Client: Southern Company Data: McDonough AP

Parametric Confidence Interval

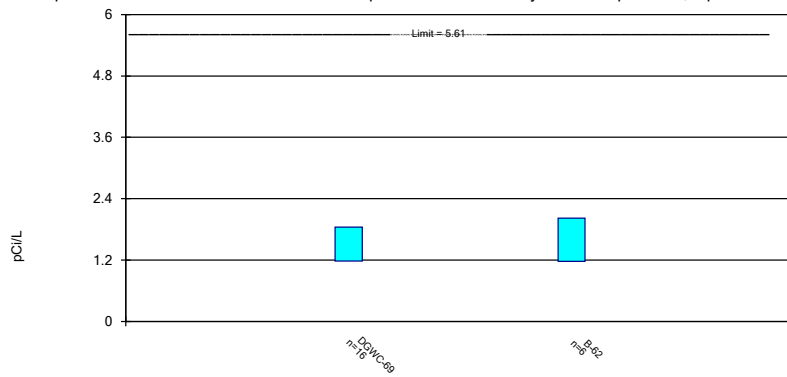
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Combined Radium 226 + 228 Analysis Run 12/16/2021 2:27 PM View: AP 1 Confidence Inter
Plant McDonough Client: Southern Company Data: McDonough AP

Parametric Confidence Interval

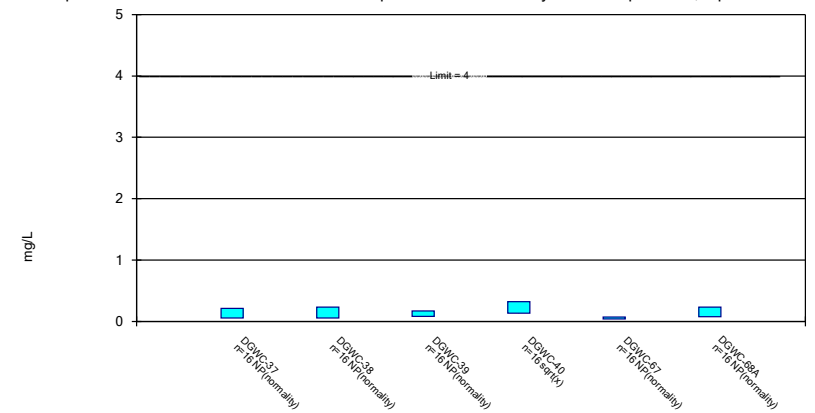
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Combined Radium 226 + 228 Analysis Run 12/16/2021 2:27 PM View: AP 1 Confidence Inter
Plant McDonough Client: Southern Company Data: McDonough AP

Parametric and Non-Parametric (NP) Confidence Interval

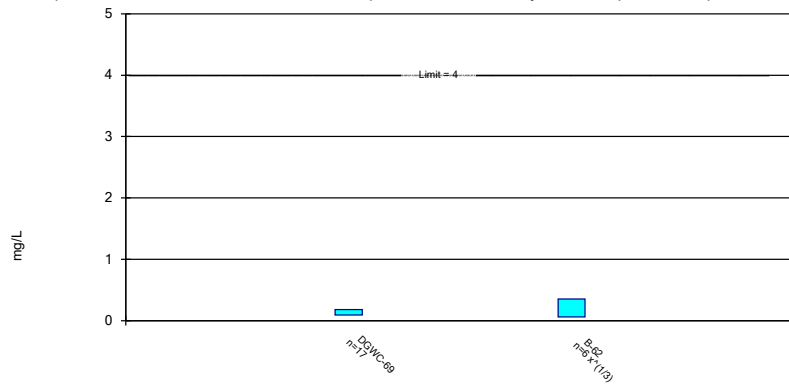
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Fluoride, total Analysis Run 12/16/2021 2:27 PM View: AP 1 Confidence Intervals
Plant McDonough Client: Southern Company Data: McDonough AP

Parametric Confidence Interval

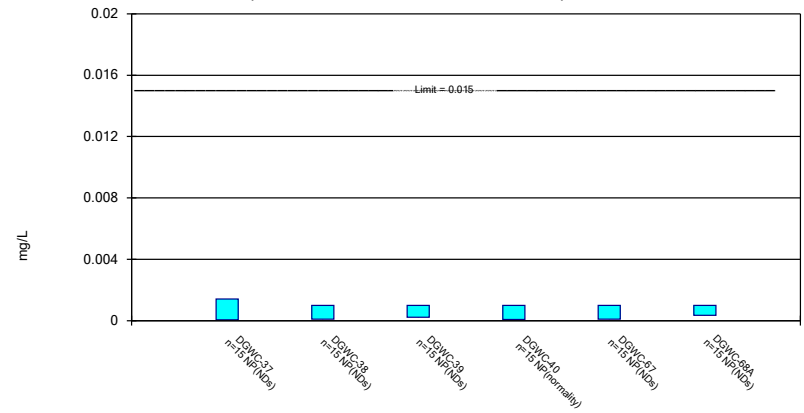
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Fluoride, total Analysis Run 12/16/2021 2:27 PM View: AP 1 Confidence Intervals
Plant McDonough Client: Southern Company Data: McDonough AP

Non-Parametric Confidence Interval

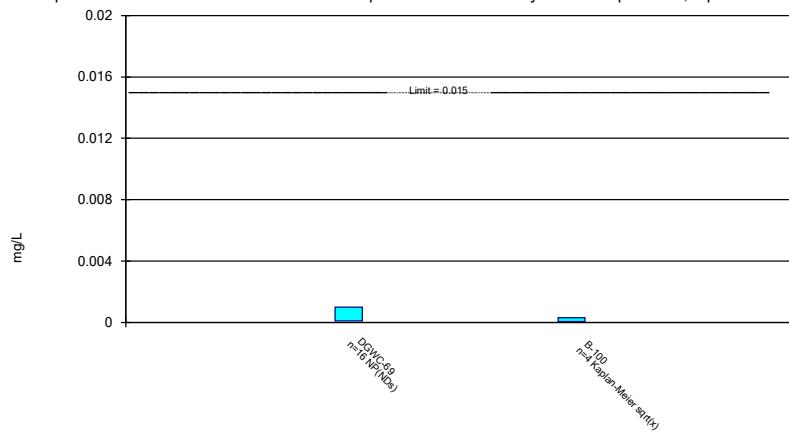
Compliance Limit is not exceeded. Per-well alpha = 0.01.



Constituent: Lead Analysis Run 12/16/2021 2:27 PM View: AP 1 Confidence Intervals
Plant McDonough Client: Southern Company Data: McDonough AP

Parametric and Non-Parametric (NP) Confidence Interval

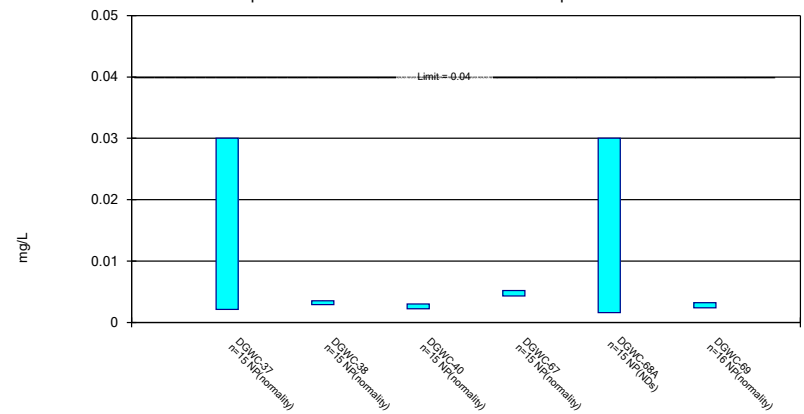
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Lead Analysis Run 12/16/2021 2:27 PM View: AP 1 Confidence Intervals
Plant McDonough Client: Southern Company Data: McDonough AP

Non-Parametric Confidence Interval

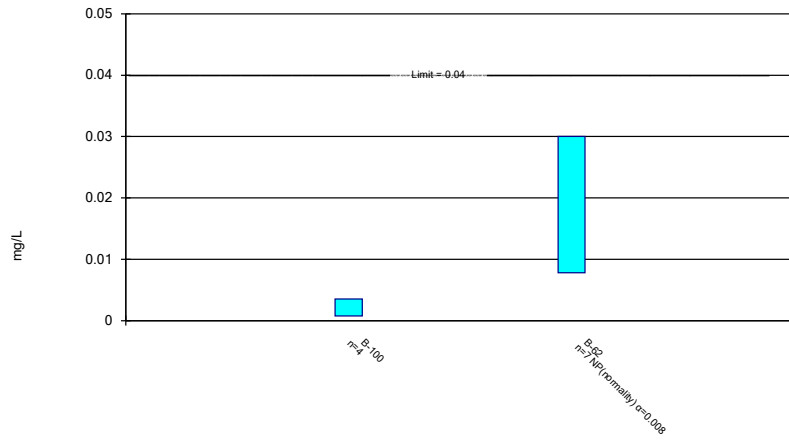
Compliance Limit is not exceeded. Per-well alpha = 0.01.



Constituent: Lithium Analysis Run 12/16/2021 2:27 PM View: AP 1 Confidence Intervals
Plant McDonough Client: Southern Company Data: McDonough AP

Parametric and Non-Parametric (NP) Confidence Interval

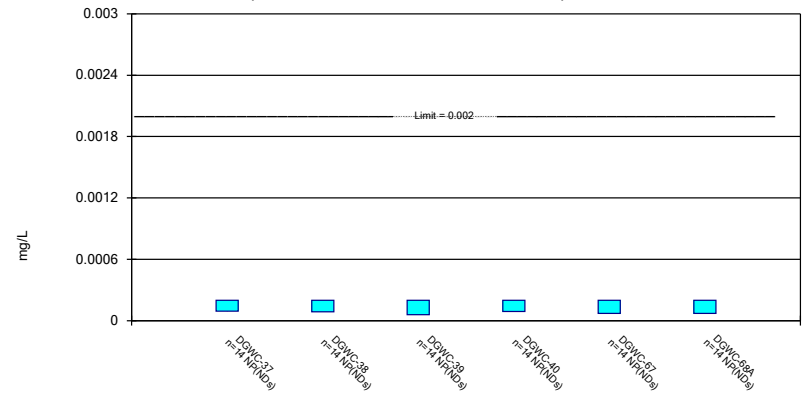
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Lithium Analysis Run 12/16/2021 2:27 PM View: AP 1 Confidence Intervals
 Plant McDonough Client: Southern Company Data: McDonough AP

Non-Parametric Confidence Interval

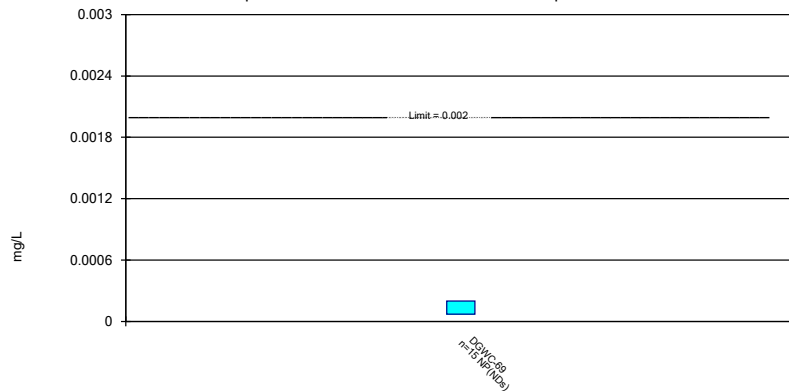
Compliance Limit is not exceeded. Per-well alpha = 0.01.



Constituent: Mercury Analysis Run 12/16/2021 2:27 PM View: AP 1 Confidence Intervals
 Plant McDonough Client: Southern Company Data: McDonough AP

Non-Parametric Confidence Interval

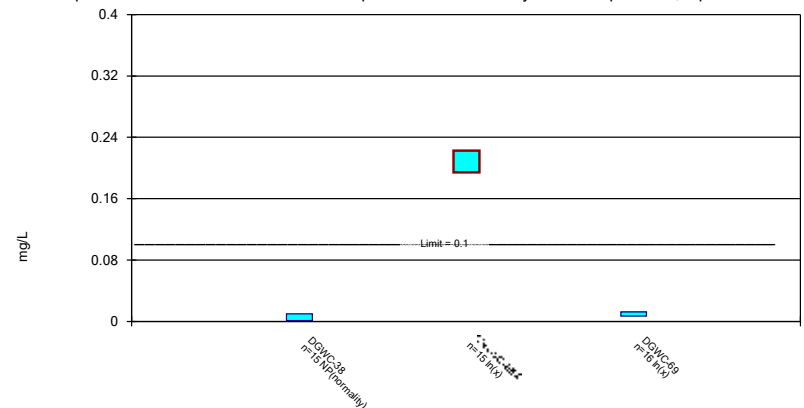
Compliance Limit is not exceeded. Per-well alpha = 0.01.



Constituent: Mercury Analysis Run 12/16/2021 2:27 PM View: AP 1 Confidence Intervals
 Plant McDonough Client: Southern Company Data: McDonough AP

Parametric and Non-Parametric (NP) Confidence Interval

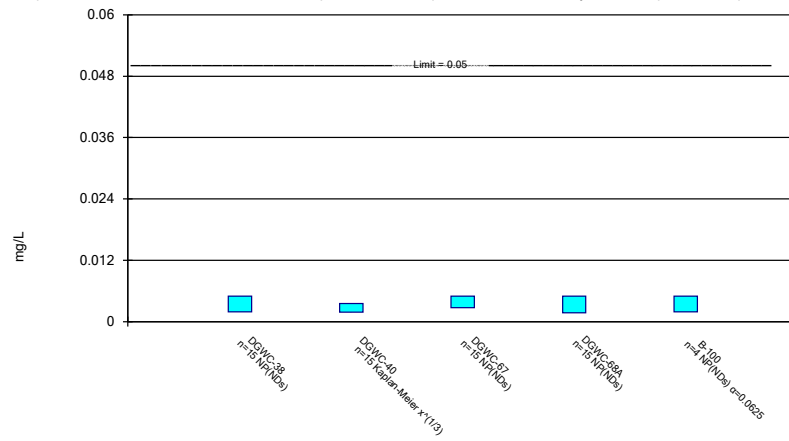
Compliance limit is exceeded.* Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Molybdenum Analysis Run 12/16/2021 2:27 PM View: AP 1 Confidence Intervals
 Plant McDonough Client: Southern Company Data: McDonough AP

Parametric and Non-Parametric (NP) Confidence Interval

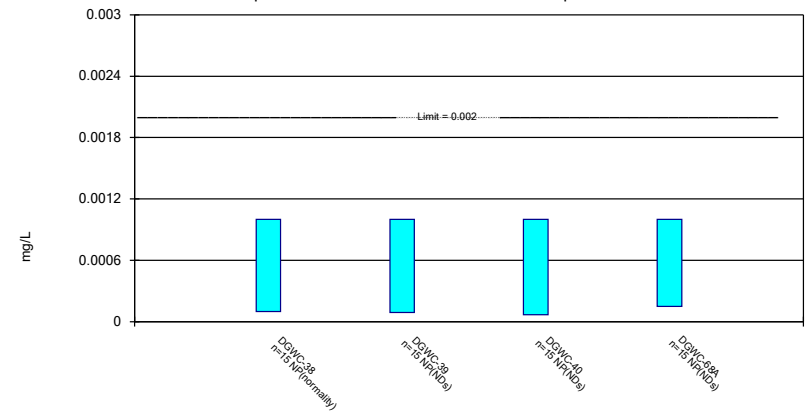
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Selenium Analysis Run 12/16/2021 2:27 PM View: AP 1 Confidence Intervals
 Plant McDonough Client: Southern Company Data: McDonough AP

Non-Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01.



Constituent: Thallium Analysis Run 12/16/2021 2:27 PM View: AP 1 Confidence Intervals
 Plant McDonough Client: Southern Company Data: McDonough AP

Confidence Interval

Constituent: Antimony (mg/L) Analysis Run 12/16/2021 2:29 PM View: AP 1 Confidence Intervals

Plant McDonough Client: Southern Company Data: McDonough AP

	DGWC-40	DGWC-67	DGWC-68A	DGWC-69	B-100	B-62
9/2/2016	<0.003					
12/8/2016	<0.003					
3/30/2017	<0.003					
3/31/2017		0.0004 (J)		<0.003		
5/12/2017		<0.003	<0.003	<0.003		
6/16/2017		0.0008 (J)	0.0008 (J)	0.0007 (J)		
7/13/2017	<0.003	<0.003	<0.003	<0.003		
8/8/2017			<0.003			
10/26/2017	<0.003	<0.003	<0.003	<0.003		
11/15/2017				<0.003		
3/2/2018	<0.003	<0.003	<0.003	<0.003		
7/12/2018	<0.003					
7/13/2018		0.0023 (J)	<0.003	<0.003		
11/8/2018	<0.003	<0.003	<0.003	<0.003		
1/30/2019						<0.003
8/28/2019	<0.003	<0.003	<0.003	<0.003		
9/11/2019						<0.003
10/21/2019						<0.003
3/4/2020	<0.003					
3/9/2020		<0.003	<0.003	<0.003		
8/13/2020	<0.003	<0.003	<0.003	0.0019 (J)		<0.003
8/17/2020					0.0013 (J)	
9/23/2020	<0.003	<0.003	<0.003	<0.003		
9/24/2020						0.00046 (J)
9/25/2020					<0.003	
3/8/2021	0.00033 (J)				0.0017 (J)	
3/10/2021			0.00032 (J)	0.0018 (J)		
3/11/2021		<0.003				
3/12/2021						<0.003
9/9/2021						<0.003
9/13/2021					<0.003	
9/14/2021	<0.003					
9/16/2021		<0.003	<0.003	<0.003		
Mean	0.002809	0.002607	0.002651	0.002693	0.00225	0.002637
Std. Dev.	0.0007136	0.000874	0.000891	0.0006829	0.0008813	0.00096
Upper Lim.	0.003	0.003	0.003	0.003	0.001954	0.003
Lower Lim.	0.00033	0.0023	0.0008	0.0019	0.001046	0.00046

Confidence Interval

Constituent: Arsenic (mg/L) Analysis Run 12/16/2021 2:29 PM View: AP 1 Confidence Intervals

Plant McDonough Client: Southern Company Data: McDonough AP

	DGWC-37	DGWC-38	DGWC-39	DGWC-40	DGWC-67	DGWC-68A
9/2/2016				<0.005		
9/8/2016	<0.005	<0.005	<0.005			
12/7/2016	0.0019 (J)	<0.005	<0.005			
12/8/2016				<0.005		
3/30/2017	<0.005	<0.005	0.0007 (J)	0.0006 (J)		
3/31/2017					<0.005	
5/12/2017					<0.005	<0.005
6/16/2017					<0.005	<0.005
7/13/2017	<0.005	0.0005 (J)	0.0009 (J)	<0.005	<0.005	<0.005
8/8/2017						<0.005
10/26/2017	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
3/1/2018	<0.005	<0.005	0.0011 (J)			
3/2/2018				0.0011 (J)	<0.005	<0.005
7/12/2018	<0.005	<0.005	0.00057 (J)	<0.005		
7/13/2018					<0.005	<0.005
11/8/2018	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005 (J)
8/28/2019	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
10/16/2019						<0.005
10/17/2019					0.00042 (J)	
10/18/2019	<0.005	<0.005	0.00075 (J)	<0.005		
3/4/2020				0.00065 (J)		
3/9/2020	<0.005	<0.005	0.00039 (J)		<0.005	<0.005
8/13/2020	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
9/23/2020				<0.005	<0.005	<0.005
9/24/2020	<0.005	<0.005				
9/25/2020			0.00087 (J)			
3/8/2021				<0.005		
3/10/2021						<0.005
3/11/2021	<0.005	<0.005	<0.005		0.0008 (J)	
9/14/2021				<0.005		
9/15/2021		<0.005				
9/16/2021	<0.005				<0.005	0.46 (o)
9/17/2021			<0.005			
10/27/2021						0.0016 (J)
Mean	0.004793	0.0047	0.003019	0.004157	0.004415	0.004773
Std. Dev.	0.0008004	0.001162	0.002198	0.001749	0.001546	0.0008779
Upper Lim.	0.005	0.005	0.005	0.005	0.005	0.005
Lower Lim.	0.0019	0.0005	0.0007	0.0011	0.0008	0.0016

Confidence Interval

Constituent: Arsenic (mg/L) Analysis Run 12/16/2021 2:29 PM View: AP 1 Confidence Intervals
Plant McDonough Client: Southern Company Data: McDonough AP

	DGWC-69
3/31/2017	0.0239
4/12/2017	0.0077
5/12/2017	0.0097
6/16/2017	0.0113
7/13/2017	0.0029 (J)
10/26/2017	0.114
11/15/2017	0.164
3/2/2018	0.0127
7/13/2018	0.017
11/8/2018	0.02
8/28/2019	0.025
10/16/2019	0.023
3/9/2020	0.029
8/13/2020	0.029
9/23/2020	0.032
3/10/2021	0.028
9/16/2021	0.023
Mean	0.03366
Std. Dev.	0.04147
Upper Lim.	0.0386
Lower Lim.	0.01205

Confidence Interval

Constituent: Barium (mg/L) Analysis Run 12/16/2021 2:29 PM View: AP 1 Confidence Intervals

Plant McDonough Client: Southern Company Data: McDonough AP

	DGWC-37	DGWC-38	DGWC-39	DGWC-40	DGWC-67	DGWC-68A
9/2/2016				0.0171		
9/8/2016	0.123	0.0333	0.0978			
12/7/2016	0.125	0.0336	0.0844			
12/8/2016				0.0163		
3/30/2017	0.11	0.0325	0.0858	0.0177		
3/31/2017					0.111	
5/12/2017					0.127	0.089
6/16/2017					0.11	0.0855
7/13/2017	0.11	0.0332	0.0919	0.017	0.102	0.0859
8/8/2017						0.0852
10/26/2017	0.112	0.0333	0.0899	0.0168	0.105	0.0878
3/1/2018	0.102	0.0333	0.0742			
3/2/2018				0.0169	0.104	0.0878
7/12/2018	0.11	0.034	0.094	0.018		
7/13/2018					0.11	0.091
11/8/2018	0.11	0.035	0.1	0.017	0.11	0.092
8/28/2019	0.086	0.033	0.099	0.017	0.11	0.089
10/16/2019						0.089
10/17/2019					0.1	
10/18/2019	0.079	0.032	0.1	0.019		
3/4/2020				0.018		
3/9/2020	0.092	0.032	0.076		0.11	0.088
8/13/2020	0.088	0.032	0.089	0.018	0.095	0.088
9/23/2020				0.019	0.1	0.094
9/24/2020	0.094	0.032				
9/25/2020			0.1			
3/8/2021				0.016		
3/10/2021						0.09
3/11/2021	0.075	0.032	0.078		0.11	
9/14/2021				0.027		
9/15/2021		0.032				
9/16/2021	0.083				0.088	0.13 (o)
9/17/2021			0.09			
10/27/2021						0.086
Mean	0.09993	0.03288	0.09	0.01805	0.1061	0.08855
Std. Dev.	0.0158	0.0009143	0.008868	0.002624	0.008863	0.00248
Upper Lim.	0.1106	0.0336	0.09601	0.019	0.1121	0.09023
Lower Lim.	0.08922	0.032	0.08399	0.0168	0.1001	0.08687

Confidence Interval

Constituent: Barium (mg/L) Analysis Run 12/16/2021 2:29 PM View: AP 1 Confidence Intervals

Plant McDonough Client: Southern Company Data: McDonough AP

	DGWC-69	B-62
3/31/2017	0.0872	
5/12/2017	0.0929	
6/16/2017	0.1	
7/13/2017	0.0985	
10/26/2017	0.136	
11/15/2017	0.107	
3/2/2018	0.0671	
7/13/2018	0.074	
11/8/2018	0.072	
1/30/2019		0.018
8/28/2019	0.061	
9/11/2019		0.023
10/16/2019	0.1	
10/21/2019		0.026
3/9/2020	0.057	
8/13/2020	0.13	0.026
9/23/2020	0.055	
9/24/2020		0.025
3/10/2021	0.048	
3/12/2021		0.027
9/9/2021		0.021
9/16/2021	0.078	
Mean	0.08523	0.02371
Std. Dev.	0.02594	0.003251
Upper Lim.	0.1021	0.02758
Lower Lim.	0.06835	0.01985

Confidence Interval

Constituent: Beryllium (mg/L) Analysis Run 12/16/2021 2:29 PM View: AP 1 Confidence Intervals
 Plant McDonough Client: Southern Company Data: McDonough AP

	DGWC-37	DGWC-38	DGWC-40	DGWC-68A	DGWC-69	B-100
9/2/2016			0.0028 (J)			
9/8/2016	<0.0005	<0.0005				
12/7/2016	<0.0005	<0.0005				
12/8/2016			0.0026 (J)			
3/30/2017	<0.0005	<0.0005	0.003			
3/31/2017					7E-05 (J)	
5/12/2017				<0.0005	<0.0005	
6/16/2017				<0.0005	<0.0005	
7/13/2017	<0.0005	<0.0005	0.003 (J)	<0.0005	<0.0005	
8/8/2017				<0.0005		
10/26/2017	<0.0005	<0.0005	0.0027 (J)	<0.0005	<0.0005	
11/15/2017					<0.0005	
3/1/2018	<0.0005	<0.0005				
3/2/2018			0.0033	<0.0005	<0.0005	
7/12/2018	7E-05 (J)	<0.0005	0.0032			
7/13/2018				8.4E-05 (J)	5.8E-05 (J)	
11/8/2018	<0.0005	<0.0005	<0.003 (J)	<0.0005	<0.0005	
8/28/2019	8.6E-05 (J)	<0.0005	0.0032	<0.0005	<0.0005	
10/16/2019				<0.0005	<0.0005	
10/18/2019	<0.0005	<0.0005	0.0033			
3/4/2020			0.0039			
3/9/2020	<0.0005	<0.0005		<0.0005	7.5E-05 (J)	
8/13/2020	0.0001 (J)	<0.0005	0.0033	<0.0005	6.3E-05 (J)	
8/17/2020						0.0004 (J)
9/23/2020			0.0031	<0.0005	6.1E-05 (J)	
9/24/2020	8.8E-05 (J)	5.8E-05 (J)				
9/25/2020						0.00035 (J)
3/8/2021			0.003			0.00046 (J)
3/10/2021				6.1E-05 (J)	5E-05 (J)	
3/11/2021	<0.0005	<0.0005				
9/13/2021						0.00053
9/14/2021			0.0032			
9/15/2021		<0.0005				
9/16/2021	5.9E-05 (J)			<0.0005	<0.0005	
Mean	0.0003602	0.0004705	0.003107	0.000443	0.0003361	0.000435
Std. Dev.	0.0002048	0.0001141	0.0003081	0.0001505	0.0002186	7.767E-05
Upper Lim.	0.0005	0.0005	0.003315	0.0005	0.0005	0.0006113
Lower Lim.	8.6E-05	5.8E-05	0.002898	8.4E-05	6.1E-05	0.0002587

Confidence Interval

Constituent: Beryllium (mg/L) Analysis Run 12/16/2021 2:29 PM View: AP 1 Confidence Intervals
Plant McDonough Client: Southern Company Data: McDonough AP

	B-62
10/6/2016	9E-05 (J)
1/30/2019	<0.0005
9/11/2019	0.00012 (J)
10/21/2019	7.8E-05 (J)
8/13/2020	0.00011 (J)
9/24/2020	0.00013 (J)
3/12/2021	<0.0005
9/9/2021	0.00014 (J)
Mean	0.0002085
Std. Dev.	0.000181
Upper Lim.	0.0005
Lower Lim.	7.8E-05

Confidence Interval

Constituent: Cadmium (mg/L) Analysis Run 12/16/2021 2:29 PM View: AP 1 Confidence Intervals

Plant McDonough Client: Southern Company Data: McDonough AP

	DGWC-37	DGWC-38	DGWC-40	DGWC-67	DGWC-68A	DGWC-69
9/2/2016			0.0008 (J)			
9/8/2016	0.0002 (J)	0.0002 (J)				
12/7/2016	0.0001 (J)	0.0002 (J)				
12/8/2016			0.0007 (J)			
3/30/2017	0.0001 (J)	0.0002 (J)	0.0007 (J)			
3/31/2017				<0.0005		0.0001 (J)
5/12/2017				<0.0005	8E-05 (J)	0.0002 (J)
6/16/2017				<0.0005	<0.0005	0.0002 (J)
7/13/2017	<0.0005	0.0002 (J)	0.0008 (J)	<0.0005	<0.0005	<0.0005
8/8/2017					<0.0005	
10/26/2017	<0.0005	0.0002 (J)	0.0008 (J)	<0.0005	<0.0005	<0.0005
11/15/2017						<0.0005
3/1/2018	<0.0005	<0.0005				
3/2/2018			<0.0005	<0.0005	<0.0005	<0.0005
7/12/2018	<0.0005	0.00024 (J)	0.00087 (J)			
7/13/2018				<0.0005	0.00019 (J)	<0.0005
11/8/2018	<0.0005	<0.001 (J)	<0.001 (J)	<0.0005	<0.001 (J)	<0.0005
8/28/2019	<0.0005	0.0003 (J)	0.00087 (J)	0.00017 (J)	0.00017 (J)	<0.0005
10/16/2019					0.00017 (J)	0.00017 (J)
10/17/2019				<0.0005		
10/18/2019	<0.0005	0.00016 (J)	0.00088 (J)			
3/4/2020			0.00093 (J)			
3/9/2020	<0.0005	0.00017 (J)		0.00021 (J)	0.00026 (J)	<0.0005
8/13/2020	<0.0005	0.00021 (J)	0.00084 (J)	0.00015 (J)	0.00021 (J)	<0.0005
9/23/2020			0.0008 (J)	0.00018 (J)	0.00024 (J)	<0.0005
9/24/2020	0.00027 (J)	0.00081 (J)				
3/8/2021			0.00072			
3/10/2021					<0.0005	<0.0005
3/11/2021	<0.0005	<0.0005		0.00053		
9/14/2021			0.00086			
9/15/2021		0.00021 (J)				
9/16/2021	0.00013 (J)			<0.0005	<0.0005	<0.0005
Mean	0.0003867	0.00034	0.0008047	0.000416	0.000388	0.0004169
Std. Dev.	0.0001705	0.0002553	0.0001178	0.0001495	0.0002332	0.0001502
Upper Lim.	0.0005	0.0005	0.0008845	0.00053	0.001	0.0005
Lower Lim.	0.00013	0.00017	0.0007248	0.00018	0.00017	0.0002

Confidence Interval

Constituent: Cadmium (mg/L) Analysis Run 12/16/2021 2:29 PM View: AP 1 Confidence Intervals
Plant McDonough Client: Southern Company Data: McDonough AP

	B-100
8/17/2020	0.00059 (J)
9/25/2020	0.00027 (J)
3/8/2021	0.00027 (J)
9/13/2021	0.00029 (J)
Mean	0.000355
Std. Dev.	0.000157
Upper Lim.	0.00059
Lower Lim.	0.00027

Confidence Interval

Constituent: Chromium (mg/L) Analysis Run 12/16/2021 2:29 PM View: AP 1 Confidence Intervals

Plant McDonough Client: Southern Company Data: McDonough AP

	DGWC-37	DGWC-38	DGWC-40	DGWC-67	DGWC-68A	DGWC-69
9/2/2016			<0.005			
9/8/2016	<0.005	<0.005				
12/7/2016	<0.005	<0.005				
12/8/2016			<0.005			
3/30/2017	<0.005	<0.005	0.0007 (J)			
3/31/2017				0.0005 (J)		<0.005
5/12/2017				0.0007 (J)	<0.005	<0.005
6/16/2017				<0.005	<0.005	<0.005
7/13/2017	<0.005	<0.005	0.0006 (J)	<0.005	0.0005 (J)	<0.005
8/8/2017					<0.005	
10/26/2017	0.0007 (J)	0.0005 (J)	0.0007 (J)	<0.005	<0.005	<0.005
11/15/2017						<0.005
3/1/2018	<0.005	<0.005				
3/2/2018			<0.005	<0.005	<0.005	<0.005
7/12/2018	<0.005	<0.005	<0.005			
7/13/2018				<0.005	<0.005	<0.005
11/8/2018	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
8/28/2019	<0.005	<0.005	0.00061 (J)	<0.005	<0.005	0.00049 (J)
10/16/2019					<0.005	<0.005
10/17/2019				<0.005		
10/18/2019	<0.005	0.00092 (J)	0.00078 (J)			
3/4/2020			0.0011 (J)			
3/9/2020	<0.005	0.00044 (J)		0.00088 (J)	<0.005	0.0012 (J)
8/13/2020	0.00058 (J)	<0.005	0.00072 (J)	<0.005	<0.005	<0.005
9/23/2020			0.0011 (J)	<0.005	<0.005	0.0011 (J)
9/24/2020	<0.005	<0.005				
3/8/2021			0.0006 (J)			
3/10/2021					<0.005	0.0009 (J)
3/11/2021	<0.005	<0.005		0.0014 (J)		
9/14/2021			0.0021 (J)			
9/15/2021		<0.005				
9/16/2021	<0.005			<0.005	0.0014 (J,o)	<0.005
10/27/2021					<0.005	
Mean	0.004419	0.004124	0.002267	0.003899	0.0047	0.003981
Std. Dev.	0.001534	0.001816	0.002034	0.001899	0.001162	0.001829
Upper Lim.	0.005	0.005	0.005	0.005	0.005	0.005
Lower Lim.	0.0007	0.00092	0.00061	0.00088	0.0005	0.0011

Confidence Interval

Constituent: Chromium (mg/L) Analysis Run 12/16/2021 2:29 PM View: AP 1 Confidence Intervals
Plant McDonough Client: Southern Company Data: McDonough AP

	B-100	B-62
1/30/2019		<0.005
9/11/2019		<0.005
10/21/2019		0.00098 (J)
8/13/2020		<0.005
8/17/2020	<0.005	
9/24/2020		<0.005
9/25/2020	0.00094 (J)	
3/8/2021	0.00057 (J)	
3/12/2021		<0.005
9/9/2021		<0.005
9/13/2021	<0.005	
Mean	0.002877	0.004426
Std. Dev.	0.002456	0.001519
Upper Lim.	0.001223	0.005
Lower Lim.	0.0003828	0.00098

Confidence Interval

Constituent: Cobalt (mg/L) Analysis Run 12/16/2021 2:29 PM View: AP 1 Confidence Intervals

Plant McDonough Client: Southern Company Data: McDonough AP

	DGWC-37	DGWC-38	DGWC-39	DGWC-40	DGWC-67	DGWC-68A
9/2/2016				0.0382		
9/8/2016	<0.005	0.0015 (J)	0.0068 (J)			
12/7/2016	0.0005 (J)	0.0017 (J)	0.0071 (J)			
12/8/2016				0.0318		
3/30/2017	<0.005	0.0016 (J)	0.006 (J)	0.0364		
3/31/2017					0.0064 (J)	
5/12/2017					0.0037 (J)	0.0015 (J)
6/16/2017					0.0041 (J)	0.0003 (J)
7/13/2017	0.0003 (J)	0.0016 (J)	0.0063 (J)	0.0394	0.0037 (J)	0.0005 (J)
8/8/2017						<0.005
10/26/2017	0.0003 (J)	0.0016 (J)	0.0062 (J)	0.0371	0.0022 (J)	<0.005
3/1/2018	<0.005	<0.005	<0.005			
3/2/2018				0.0425	<0.005	<0.005
7/12/2018	<0.005	0.0015 (J)	0.0059 (J)	0.044		
7/13/2018					0.0017 (J)	<0.005
11/8/2018	<0.005	<0.01 (J)	<0.01 (J)	0.036	<0.01 (J)	<0.005
8/28/2019	<0.005	0.0016 (J)	0.0067	0.044	0.0013 (J)	<0.005
10/16/2019						<0.005
10/17/2019					0.0013 (J)	
10/18/2019	<0.005	0.0016 (J)	0.007	0.043		
3/4/2020				0.055		
3/9/2020	<0.005	0.0016 (J)	0.007		0.0015 (J)	<0.005
8/13/2020	<0.005	0.0014 (J)	0.006	0.044	0.0015 (J)	<0.005
9/23/2020				0.046	0.0011 (J)	<0.005
9/24/2020	<0.005	0.0013 (J)				
9/25/2020			0.0061			
3/8/2021				0.039		
3/10/2021						<0.005
3/11/2021	<0.005	0.0017 (J)	0.0058		0.0016 (J)	
9/14/2021				0.05		
9/15/2021		0.0016 (J)				
9/16/2021	<0.005				0.0012 (J)	0.0032 (J,o)
9/17/2021			0.0076			
10/27/2021						<0.005
Mean	0.004073	0.002353	0.006633	0.04176	0.003087	0.004153
Std. Dev.	0.001919	0.002296	0.001136	0.005898	0.002508	0.00177
Upper Lim.	0.005	0.0017	0.007286	0.04576	0.003862	0.005
Lower Lim.	0.0005	0.0015	0.005895	0.03776	0.001505	0.0015

Confidence Interval

Constituent: Cobalt (mg/L) Analysis Run 12/16/2021 2:30 PM View: AP 1 Confidence Intervals
Plant McDonough Client: Southern Company Data: McDonough AP

	DGWC-69	B-62
3/31/2017	0.0022 (J)	
5/12/2017	0.0016 (J)	
6/16/2017	0.0009 (J)	
7/13/2017	0.0004 (J)	
10/26/2017	0.0031 (J)	
11/15/2017	0.0028 (J)	
3/2/2018	<0.005	
7/13/2018	<0.005	
11/8/2018	<0.005	
1/30/2019		<0.005
8/28/2019	<0.005	
9/11/2019		0.0003 (J)
10/16/2019	<0.005	
10/21/2019		0.00031 (J)
3/9/2020	<0.005	
8/13/2020	<0.005	<0.005
9/23/2020	<0.005	
9/24/2020		<0.005
3/10/2021	<0.005	
3/12/2021		<0.005
9/9/2021		<0.005
9/16/2021	<0.005	
Mean	0.003812	0.003659
Std. Dev.	0.001698	0.002291
Upper Lim.	0.005	0.005
Lower Lim.	0.0016	0.0003

Confidence Interval

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 12/16/2021 2:30 PM View: AP 1 Confidence Intervals

Plant McDonough Client: Southern Company Data: McDonough AP

	DGWC-37	DGWC-38	DGWC-39	DGWC-40	DGWC-67	DGWC-68A
9/2/2016				1.44		
9/8/2016	0.827 (U)	1.48	1.44			
12/7/2016	0.56 (U)	0.22 (U)	2.16			
12/8/2016				2.56		
3/30/2017	0.302 (U)	0.519 (U)	0.264 (U)	0.0844 (U)		
3/31/2017					0.404 (U)	
5/12/2017					0.206 (U)	1.18
6/16/2017					0.966 (U)	0.332 (U)
7/13/2017	0.731 (U)	1.11	0.517 (U)	0.963 (U)	0.387 (U)	0.304 (U)
8/8/2017						1.4
10/26/2017	1.04 (U)	1.13 (U)	0.875 (U)	0.748 (U)	0.619 (U)	0.477 (U)
3/1/2018	0.344 (U)	0.985 (U)	1.24			
3/2/2018				0.485 (U)	1.31	1.13
7/12/2018	0.566 (U)	0.615 (U)	0.935 (U)	0.231 (U)		
7/13/2018					0.667 (U)	0.407 (U)
11/8/2018	0.623 (U)	0.58 (U)	1.15 (U)	0.465 (U)	0.911 (U)	0.393 (U)
8/28/2019	1.24 (U)	0.517 (U)	1.15 (U)	0.592 (U)	0.751 (U)	1.77
10/16/2019						2.12
1/6/2020	2.01	0.527 (U)	1.4	1.6	0.965 (U)	
3/4/2020				1.62		
3/9/2020	0.499 (U)	1.04	1.36		0.819 (U)	1.33
8/13/2020	0.99	0.132 (U)	0.626 (U)	1.6	0.897 (U)	1.46
9/23/2020				1.28 (U)	0.131 (U)	0.563 (U)
9/24/2020	1.03 (U)	0.593 (U)				
9/25/2020			0.181 (U)			
3/8/2021				0.714 (U)		
3/10/2021						0.568 (U)
3/11/2021	0.956 (U)	0.0784 (U)	0.969 (U)		1.55	
9/14/2021				1.8		
9/15/2021		2.37				
9/16/2021	0.691 (U)				0.201 (U)	1.74
9/17/2021			0.911 (U)			
Mean	0.8273	0.7931	1.012	1.079	0.7189	1.012
Std. Dev.	0.4247	0.5907	0.5031	0.6893	0.4089	0.6109
Upper Lim.	1.115	1.193	1.353	1.546	0.996	1.426
Lower Lim.	0.5395	0.3928	0.6709	0.6118	0.4419	0.5976

Confidence Interval

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 12/16/2021 2:30 PM View: AP 1 Confidence Intervals

Plant McDonough Client: Southern Company Data: McDonough AP

	DGWC-69	B-62
3/31/2017	1.39	
5/12/2017	1.29	
6/16/2017	1.61	
7/13/2017	1.14	
10/26/2017	2.04	
11/15/2017	1.99	
3/2/2018	0.918 (U)	
7/13/2018	1.36 (U)	
11/8/2018	0.719 (U)	
1/30/2019		1.97 (U)
8/28/2019	1.38	
10/16/2019	0.826 (U)	
10/21/2019		1.82
3/9/2020	1.39	
8/13/2020	2.66	1.63
9/23/2020	1.8	
9/24/2020		1.28 (U)
3/10/2021	1.6	
3/12/2021		1.18 (U)
9/9/2021		1.7
9/16/2021	2.06	
Mean	1.511	1.597
Std. Dev.	0.5122	0.3082
Upper Lim.	1.844	2.02
Lower Lim.	1.178	1.173

Confidence Interval

Constituent: Fluoride, total (mg/L) Analysis Run 12/16/2021 2:30 PM View: AP 1 Confidence Intervals

Plant McDonough Client: Southern Company Data: McDonough AP

	DGWC-37	DGWC-38	DGWC-39	DGWC-40	DGWC-67	DGWC-68A
9/2/2016				0.5		
9/8/2016	0.08 (J)	0.1 (J)	0.17 (J)			
12/7/2016	0.21 (J)	0.27 (J)	0.33			
12/8/2016				0.35		
3/30/2017	0.05 (J)	0.12 (J)	0.17 (J)	0.21 (J)		
3/31/2017					0.02 (J)	
5/12/2017					<0.1	0.37
6/16/2017					0.03 (J)	0.12 (J)
7/13/2017	0.06 (J)	0.13 (J)	0.14 (J)	0.2 (J)	0.03 (J)	0.12 (J)
8/8/2017						0.11 (J)
10/26/2017	0.08 (J)	0.47	0.54	0.5	<0.1	0.11 (J)
3/1/2018	0.22	<0.1	0.13			
3/2/2018				0.33	<0.1	0.23
7/12/2018	0.32	0.23 (J)	0.13 (J)	0.57		
7/13/2018					0.25 (J)	0.099 (J)
11/8/2018	<0.1	<0.1	<0.3 (J)	<0.3 (J)	0.5	<0.3 (J)
3/13/2019	0.08 (J)	0.084 (J)	0.085 (J)	0.15 (J)	0.07 (J)	0.12 (J)
8/28/2019	0.074 (J)	0.066 (J)	0.086 (J)	0.14	<0.1	0.1
10/16/2019						0.093 (J)
10/17/2019					0.038 (J)	
10/18/2019	0.075 (J)	0.073 (J)	0.14 (J)	0.13 (J)		
3/4/2020				0.11 (J)		
3/9/2020	0.054 (J)	0.064 (J)	0.075 (J)		<0.1	0.082 (J)
8/13/2020	0.068 (J)	0.06 (J)	0.076 (J)	0.16	<0.1	0.076 (J)
9/23/2020				0.054 (J)	<0.1	0.07 (J)
9/24/2020	0.061 (J)	0.057 (J)				
9/25/2020			0.086 (J)			
3/8/2021				0.17		
3/10/2021						0.07 (J)
3/11/2021	0.057 (J)	0.058 (J)	0.083 (J)		<0.1	
9/14/2021				0.13		
9/15/2021		0.06 (J)				
9/16/2021	0.084 (J)				0.069 (J)	0.55
9/17/2021			0.13			
Mean	0.1014	0.1214	0.1576	0.2409	0.08794	0.1544
Std. Dev.	0.07777	0.1131	0.1194	0.1592	0.1217	0.1295
Upper Lim.	0.21	0.23	0.17	0.3219	0.07	0.23
Lower Lim.	0.054	0.057	0.083	0.1358	0.038	0.076

Confidence Interval

Constituent: Fluoride, total (mg/L) Analysis Run 12/16/2021 2:30 PM View: AP 1 Confidence Intervals
Plant McDonough Client: Southern Company Data: McDonough AP

	DGWC-69	B-62
3/31/2017	0.16 (J)	
5/12/2017	0.12 (J)	
6/16/2017	0.16 (J)	
7/13/2017	0.13 (J)	
10/26/2017	0.29 (J)	
11/15/2017	0.28 (J)	
3/2/2018	0.18	
7/13/2018	0.19 (J)	
11/8/2018	<0.3 (J)	
1/30/2019		0.43
3/13/2019	0.086 (J)	
8/28/2019	0.07 (J)	
10/16/2019	0.13 (J)	
10/21/2019		0.23 (J)
3/9/2020	0.068 (J)	
8/13/2020	0.084 (J)	0.11
9/23/2020	0.064 (J)	
9/24/2020		0.093 (J)
3/10/2021	0.055 (J)	
3/12/2021		0.11
9/9/2021		0.14
9/16/2021	0.11	
Mean	0.1369	0.1855
Std. Dev.	0.06963	0.1295
Upper Lim.	0.1805	0.3546
Lower Lim.	0.09325	0.06003

Confidence Interval

Constituent: Lead (mg/L) Analysis Run 12/16/2021 2:30 PM View: AP 1 Confidence Intervals
 Plant McDonough Client: Southern Company Data: McDonough AP

	DGWC-37	DGWC-38	DGWC-39	DGWC-40	DGWC-67	DGWC-68A
9/2/2016				<0.001		
9/8/2016	<0.001	<0.001	<0.001			
12/7/2016	<0.001	<0.001	<0.001			
12/8/2016				<0.001		
3/30/2017	0.0014 (J)	<0.001	<0.001	7E-05 (J)		
3/31/2017					<0.001	
5/12/2017					9E-05 (J)	<0.001
6/16/2017					<0.001	<0.001
7/13/2017	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
8/8/2017						<0.001
10/26/2017	<0.001	0.0001 (J)	<0.001	7E-05 (J)	<0.001	<0.001
3/1/2018	<0.001	<0.001	<0.001			
3/2/2018				<0.001	<0.001	<0.001
7/12/2018	<0.001	<0.001	<0.001	<0.001		
7/13/2018					<0.001	<0.001
11/8/2018	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
8/28/2019	6.1E-05 (J)	<0.001	8E-05 (J)	8.1E-05 (J)	<0.001	<0.001
10/16/2019						<0.001
10/17/2019					<0.001	
10/18/2019	<0.001	7.4E-05 (J)	<0.001	0.00015 (J)		
3/4/2020				0.00017 (J)		
3/9/2020	<0.001	6.1E-05 (J)	<0.001		4.7E-05 (J)	<0.001
8/13/2020	<0.001	<0.001	<0.001	4.9E-05 (J)	5.6E-05 (J)	<0.001
9/23/2020				0.00028 (J)	<0.001	0.00035 (J)
9/24/2020	<0.001	0.00014 (J)				
9/25/2020			0.00022 (J)			
3/8/2021				5.4E-05 (J)		
3/10/2021						6.7E-05 (J)
3/11/2021	<0.001	0.00014 (J)	<0.001		0.00025 (J)	
9/14/2021				<0.001		
9/15/2021		<0.001				
9/16/2021	<0.001				<0.001	<0.001
9/17/2021			<0.001			
Mean	0.0009641	0.000701	0.0008867	0.0005283	0.0007629	0.0008945
Std. Dev.	0.0002702	0.0004381	0.0003003	0.0004602	0.0004094	0.0002836
Upper Lim.	0.0014	0.001	0.001	0.001	0.001	0.001
Lower Lim.	6.1E-05	0.0001	0.00022	7E-05	9E-05	0.00035

Confidence Interval

Constituent: Lead (mg/L) Analysis Run 12/16/2021 2:30 PM View: AP 1 Confidence Intervals
Plant McDonough Client: Southern Company Data: McDonough AP

	DGWC-69	B-100
3/31/2017	<0.001	
5/12/2017	0.0001 (J)	
6/16/2017	<0.001	
7/13/2017	<0.001	
10/26/2017	<0.001	
11/15/2017	9E-05 (J)	
3/2/2018	<0.001	
7/13/2018	<0.001	
11/8/2018	<0.001	
8/28/2019	<0.001	
10/16/2019	<0.001	
3/9/2020	9E-05 (J)	
8/13/2020	5.9E-05 (J)	
8/17/2020		8.8E-05 (J)
9/23/2020	0.00017 (J)	
9/25/2020		0.00021 (J)
3/8/2021		0.00018 (J)
3/10/2021	0.0001 (J)	
9/13/2021		<0.001
9/16/2021	<0.001	
Mean	0.0006631	0.0003695
Std. Dev.	0.0004498	0.0004235
Upper Lim.	0.001	0.0003036
Lower Lim.	9E-05	5.528E-05

Confidence Interval

Constituent: Lithium (mg/L) Analysis Run 12/16/2021 2:30 PM View: AP 1 Confidence Intervals

Plant McDonough Client: Southern Company Data: McDonough AP

	DGWC-37	DGWC-38	DGWC-40	DGWC-67	DGWC-68A	DGWC-69
9/2/2016			0.0022 (J)			
9/8/2016	<0.03	0.0032 (J)				
12/7/2016	<0.03	0.0035 (J)				
12/8/2016			<0.03			
3/30/2017	0.0029 (J)	0.0035 (J)	0.0023 (J)			
3/31/2017				0.0052 (J)		0.0031 (J)
5/12/2017				0.0054 (J)	0.0016 (J)	0.003 (J)
6/16/2017				0.0048 (J)	<0.03	0.0031 (J)
7/13/2017	<0.03	0.0032 (J)	0.0023 (J)	0.0044 (J)	<0.03	0.0029 (J)
8/8/2017					<0.03	
10/26/2017	0.0018 (J)	0.0034 (J)	0.0021 (J)	0.0043 (J)	<0.03	0.0034 (J)
11/15/2017						0.0034 (J)
3/1/2018	0.0024 (J)	0.0033 (J)				
3/2/2018			0.0023 (J)	0.0047 (J)	<0.03	0.0028 (J)
7/12/2018	0.0028 (J)	0.0034 (J)	0.0022 (J)			
7/13/2018				0.0041 (J)	<0.03	0.0026 (J)
11/8/2018	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
8/28/2019	0.0025 (J)	0.0034 (J)	0.0022 (J)	0.0046 (J)	<0.03	0.0024 (J)
10/16/2019					<0.03	0.0032 (J)
10/17/2019				0.0047 (J)		
10/18/2019	0.0026 (J)	0.0032 (J)	0.0024 (J)			
3/4/2020			0.0027 (J)			
3/9/2020	0.0017 (J)	0.0033 (J)		0.0048 (J)	<0.03	0.0025 (J)
8/13/2020	0.0023 (J)	0.0028 (J)	0.0022 (J)	0.0044 (J)	<0.03	0.0031 (J)
9/23/2020			0.0022 (J)	0.0043 (J)	<0.03	0.0023 (J)
9/24/2020	0.0021 (J)	0.0029 (J)				
3/8/2021			0.0022 (J)			
3/10/2021					<0.03	0.0023 (J)
3/11/2021	0.0024 (J)	0.003 (J)		0.005 (J)		
9/14/2021			0.003 (J)			
9/15/2021		0.0029 (J)				
9/16/2021	0.0021 (J)			0.0044 (J)	0.00082 (J)	0.0023 (J)
Mean	0.009707	0.005	0.00602	0.00634	0.02616	0.004525
Std. Dev.	0.01267	0.00692	0.009739	0.006555	0.01013	0.006804
Upper Lim.	0.03	0.0035	0.003	0.0052	0.03	0.0032
Lower Lim.	0.0021	0.0029	0.0022	0.0043	0.0016	0.0024

Confidence Interval

Constituent: Lithium (mg/L) Analysis Run 12/16/2021 2:30 PM View: AP 1 Confidence Intervals
Plant McDonough Client: Southern Company Data: McDonough AP

	B-100	B-62
1/30/2019		<0.03
9/11/2019		0.0078 (J)
10/21/2019		0.0078 (J)
8/13/2020		0.0087 (J)
8/17/2020	0.0013 (J)	
9/24/2020		0.0084 (J)
9/25/2020	0.0027 (J)	
3/8/2021	0.0024 (J)	
3/12/2021		0.0087 (J)
9/9/2021		0.0094 (J)
9/13/2021	0.0022 (J)	
Mean	0.00215	0.01154
Std. Dev.	0.0006028	0.008158
Upper Lim.	0.003519	0.03
Lower Lim.	0.0007815	0.0078

Confidence Interval

Constituent: Mercury (mg/L) Analysis Run 12/16/2021 2:30 PM View: AP 1 Confidence Intervals

Plant McDonough Client: Southern Company Data: McDonough AP

	DGWC-37	DGWC-38	DGWC-39	DGWC-40	DGWC-67	DGWC-68A
9/2/2016				4.4E-05 (J)		
9/8/2016	<0.0002	<0.0002	<0.0002			
12/7/2016	<0.0002	<0.0002	<0.0002			
12/8/2016				<0.0002		
3/30/2017	6E-05 (J)	7E-05 (J)	5.9E-05 (J)	9E-05 (J)		
3/31/2017					<0.0002	
5/12/2017					<0.0002	<0.0002
6/16/2017					7E-05 (J)	7E-05 (J)
7/13/2017	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
8/8/2017						<0.0002
10/26/2017	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
3/1/2018	<0.0002	<0.0002	<0.0002			
3/2/2018				<0.0002	<0.0002	<0.0002
7/12/2018	4.4E-05 (J)	4E-05 (J)	<0.0002	4.5E-05 (J)		
7/13/2018					<0.0002	<0.0002
11/8/2018	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
8/28/2019	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
10/16/2019						<0.0002
10/17/2019					<0.0002	
10/18/2019	<0.0002	<0.0002	<0.0002	<0.0002		
3/4/2020				<0.0002		
3/9/2020	<0.0002	<0.0002	<0.0002		<0.0002	<0.0002
8/13/2020	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
9/23/2020				<0.0002	<0.0002	<0.0002
9/24/2020	9.1E-05 (J)	8.5E-05 (J)				
9/25/2020			<0.0002			
9/14/2021				<0.0002		
9/15/2021		<0.0002				
9/16/2021	<0.0002				<0.0002	<0.0002
9/17/2021			<0.0002			
Mean	0.0001711	0.0001711	0.0001899	0.0001699	0.0001907	0.0001907
Std. Dev.	5.824E-05	5.818E-05	3.768E-05	6.064E-05	3.474E-05	3.474E-05
Upper Lim.	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002
Lower Lim.	9.1E-05	8.5E-05	5.9E-05	9E-05	7E-05	7E-05

Confidence Interval

Constituent: Mercury (mg/L) Analysis Run 12/16/2021 2:30 PM View: AP 1 Confidence Intervals
Plant McDonough Client: Southern Company Data: McDonough AP

	DGWC-69
3/31/2017	<0.0002
5/12/2017	<0.0002
6/16/2017	7E-05 (J)
7/13/2017	<0.0002
10/26/2017	<0.0002
11/15/2017	<0.0002
3/2/2018	<0.0002
7/13/2018	<0.0002
11/8/2018	<0.0002
8/28/2019	<0.0002
10/16/2019	<0.0002
3/9/2020	<0.0002
8/13/2020	<0.0002
9/23/2020	<0.0002
9/16/2021	<0.0002
Mean	0.0001913
Std. Dev.	3.357E-05
Upper Lim.	0.0002
Lower Lim.	7E-05

Confidence Interval

Constituent: Molybdenum (mg/L) Analysis Run 12/16/2021 2:30 PM View: AP 1 Confidence Intervals

Plant McDonough Client: Southern Company Data: McDonough AP

	DGWC-38	DGWC-68A	DGWC-69
9/8/2016	<0.01		
12/7/2016	<0.01		
3/30/2017	0.0011 (J)		
3/31/2017			0.0124
5/12/2017		0.275	0.0117
6/16/2017		0.19	0.0087 (J)
7/13/2017	0.0012 (J)	0.211	0.0053 (J)
8/8/2017		0.207	
10/26/2017	0.0011 (J)	0.226	0.0244
11/15/2017			0.0237
3/1/2018	<0.01		
3/2/2018		0.215	0.0072 (J)
7/12/2018	<0.01		
7/13/2018		0.22	0.007 (J)
11/8/2018	<0.01	0.2	<0.01 (J)
8/28/2019	<0.01	0.21	0.0059 (J)
10/16/2019		0.22	0.01
10/18/2019	<0.01		
3/9/2020	0.001 (J)	0.19	0.0062 (J)
8/13/2020	0.00098 (J)	0.19	0.011
9/23/2020		0.2	0.0056 (J)
9/24/2020	0.001 (J)		
3/10/2021		0.2	0.0056 (J)
3/11/2021	0.00092 (J)		
9/15/2021	0.00099 (J)		
9/16/2021		0.18	0.009 (J)
Mean	0.005219	0.2089	0.01023
Std. Dev.	0.004629	0.02252	0.005862
Upper Lim.	0.01	0.2226	0.01236
Lower Lim.	0.00099	0.1942	0.006699

Confidence Interval

Constituent: Selenium (mg/L) Analysis Run 12/16/2021 2:30 PM View: AP 1 Confidence Intervals

Plant McDonough Client: Southern Company Data: McDonough AP

	DGWC-38	DGWC-40	DGWC-67	DGWC-68A	B-100
9/2/2016		0.0019 (J)			
9/8/2016	<0.005				
12/7/2016	<0.005				
12/8/2016		0.0022 (J)			
3/30/2017	<0.005	0.0023 (J)			
3/31/2017			<0.005		
5/12/2017			<0.005	<0.005	
6/16/2017			<0.005	<0.005	
7/13/2017	<0.005	0.0025 (J)	<0.005	<0.005	
8/8/2017				<0.005	
10/26/2017	<0.005	0.0036 (J)	<0.005	<0.005	
3/1/2018	<0.005				
3/2/2018		<0.005	<0.005	<0.005	
7/12/2018	<0.005	<0.005			
7/13/2018			<0.005	<0.005	
11/8/2018	<0.005	<0.01 (J)	<0.005	<0.005	
8/28/2019	<0.005	0.0017 (J)	<0.005	<0.005	
10/16/2019				<0.005	
10/17/2019			<0.005		
10/18/2019	<0.005	0.0027 (J)			
3/4/2020		0.0049 (J)			
3/9/2020	<0.005		<0.005	<0.005	
8/13/2020	<0.005	0.0018 (J)	<0.005	<0.005	
8/17/2020					<0.005
9/23/2020		0.0067 (J)	<0.005	<0.005	
9/24/2020	<0.005				
9/25/2020					<0.005
3/8/2021		0.0023 (J)			0.0019 (J)
3/10/2021				0.0017 (J)	
3/11/2021	0.0019 (J)		0.0027 (J)		
9/13/2021					<0.005
9/14/2021		0.0015 (J)			
9/15/2021	<0.005				
9/16/2021			<0.005	<0.005	
Mean	0.004793	0.003607	0.004847	0.00478	0.004225
Std. Dev.	0.0008004	0.002356	0.0005939	0.0008521	0.00155
Upper Lim.	0.005	0.003517	0.005	0.005	0.005
Lower Lim.	0.0019	0.001857	0.0027	0.0017	0.0019

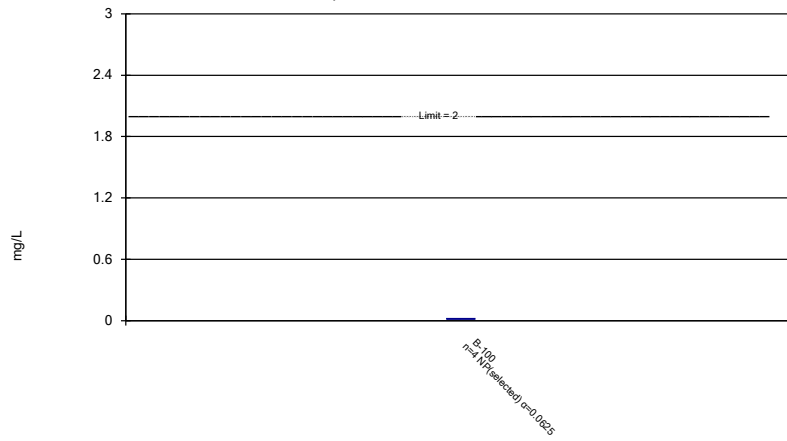
Confidence Interval

Constituent: Thallium (mg/L) Analysis Run 12/16/2021 2:30 PM View: AP 1 Confidence Intervals
 Plant McDonough Client: Southern Company Data: McDonough AP

	DGWC-38	DGWC-39	DGWC-40	DGWC-68A
9/2/2016			<0.001	
9/8/2016	<0.001	<0.001		
12/7/2016	<0.001	<0.001		
12/8/2016			<0.001	
3/30/2017	0.0001 (J)	0.0001 (J)	6E-05 (J)	
5/12/2017				<0.001
6/16/2017				<0.001
7/13/2017	0.0001 (J)	9E-05 (J)	6E-05 (J)	<0.001
8/8/2017				<0.001
10/26/2017	0.0001 (J)	0.0001 (J)	7E-05 (J)	<0.001
3/1/2018	<0.001	<0.001		
3/2/2018			<0.001	<0.001
7/12/2018	<0.001	<0.001	<0.001	
7/13/2018				0.00015 (J)
11/8/2018	<0.001	<0.001	<0.001	<0.001
8/28/2019	0.00014 (J)	6.9E-05 (J)	7E-05 (J)	<0.001
10/16/2019				<0.001
10/18/2019	0.0001 (J)	<0.001	<0.001	
3/4/2020			6.8E-05 (J)	
3/9/2020	0.00016 (J)	7.1E-05 (J)		<0.001
8/13/2020	0.00016 (J)	<0.001	<0.001	<0.001
9/23/2020			<0.001	<0.001
9/24/2020	0.00015 (J)			
9/25/2020		<0.001		
3/8/2021			<0.001	
3/10/2021				<0.001
3/11/2021	<0.001	<0.001		
9/14/2021			<0.001	
9/15/2021	<0.001			
9/16/2021				<0.001
9/17/2021		<0.001		
Mean	0.000534	0.0006953	0.0006885	0.0009433
Std. Dev.	0.0004517	0.0004461	0.0004559	0.0002195
Upper Lim.	0.001	0.001	0.001	0.001
Lower Lim.	0.0001	9E-05	6.8E-05	0.00015

Non-Parametric Confidence Interval

Compliance Limit is not exceeded.

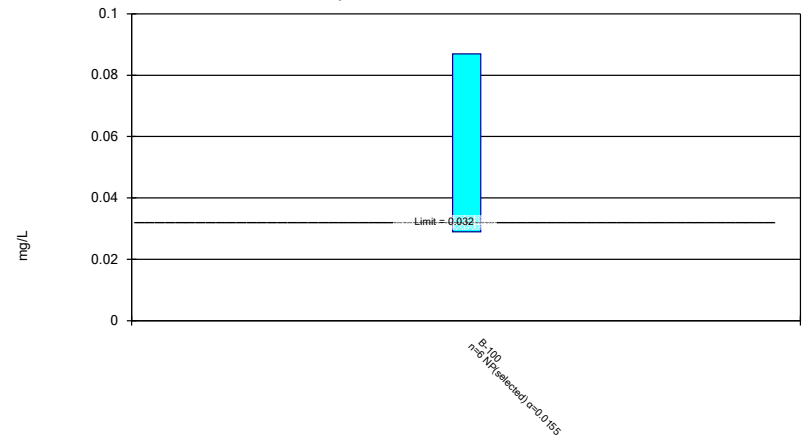


Normality testing disabled.

Constituent: Barium Analysis Run 12/16/2021 2:28 PM View: AP 1 Confidence Intervals Nonparametric
Plant McDonough Client: Southern Company Data: McDonough AP

Non-Parametric Confidence Interval

Compliance Limit is not exceeded.

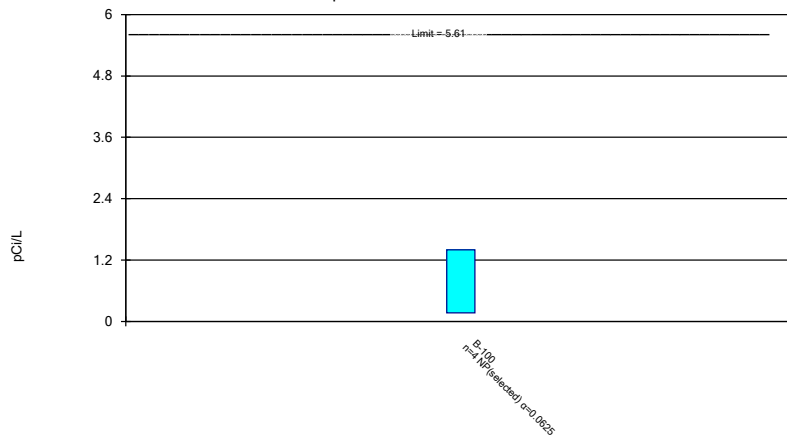


Normality testing disabled.

Constituent: Cobalt Analysis Run 12/16/2021 2:28 PM View: AP 1 Confidence Intervals Nonparametric
Plant McDonough Client: Southern Company Data: McDonough AP

Non-Parametric Confidence Interval

Compliance Limit is not exceeded.



Normality testing disabled.

Constituent: Combined Radium 226 + 228 Analysis Run 12/16/2021 2:28 PM View: AP 1 Confidence Inter
Plant McDonough Client: Southern Company Data: McDonough AP

Confidence Interval

Constituent: Barium (mg/L) Analysis Run 12/16/2021 2:30 PM View: AP 1 Confidence Intervals Nonparametric
Plant McDonough Client: Southern Company Data: McDonough AP

	B-100
8/17/2020	0.015
9/25/2020	0.022
3/8/2021	0.022
9/13/2021	0.021
Mean	0.02
Std. Dev.	0.003367
Upper Lim.	0.022
Lower Lim.	0.015

Confidence Interval

Constituent: Cobalt (mg/L) Analysis Run 12/16/2021 2:30 PM View: AP 1 Confidence Intervals Nonparametric
Plant McDonough Client: Southern Company Data: McDonough AP

	B-100
7/23/2020	0.086
8/3/2020	0.087
8/17/2020	0.077
9/25/2020	0.034
3/8/2021	0.029
9/13/2021	0.035
Mean	0.058
Std. Dev.	0.02804
Upper Lim.	0.087
Lower Lim.	0.029

Confidence Interval

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 12/16/2021 2:30 PM View: AP 1 Confidence Intervals Nonparametric
Plant McDonough Client: Southern Company Data: McDonough AP

	B-100
8/17/2020	1.4 (U)
9/25/2020	0.799 (U)
3/8/2021	0.168 (U)
9/13/2021	0.774 (U)
Mean	0.7853
Std. Dev.	0.5031
Upper Lim.	1.4
Lower Lim.	0.168

FIGURE J.

State Confidence Intervals - Significant Results

Plant McDonough Client: Southern Company Data: McDonough AP Printed 12/16/2021, 2:32 PM

<u>Constituent</u>	<u>Well</u>	<u>Upper Lim.</u>	<u>Lower Lim.</u>	<u>Compliance</u>	<u>Sig. N</u>	<u>Mean</u>	<u>Std. Dev.</u>	<u>%NDs</u>	<u>ND Adj.</u>	<u>Transform</u>	<u>Alpha</u>	<u>Method</u>
Arsenic (mg/L)	DGWC-69	0.0386	0.01205	0.01	Yes 17	0.03366	0.04147	0	None	In(x)	0.01	Param.
Cobalt (mg/L)	DGWC-40	0.04576	0.03776	0.032	Yes 15	0.04176	0.005898	0	None	No	0.01	Param.
Molybdenum (mg/L)	DGWC-68A	0.2226	0.1942	0.041	Yes 15	0.2089	0.02252	0	None	In(x)	0.01	Param.

State Confidence Intervals - All Results

Plant McDonough Client: Southern Company Data: McDonough AP Printed 12/16/2021, 2:32 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Antimony (mg/L)	B-100	0.001954	0.001046	0.006	No	4	0.00225	0.0008813	50	Kaplan-Meier	No	0.01	Param.
Antimony (mg/L)	B-62	0.003	0.00046	0.006	No	7	0.002637	0.00096	85.71	Kaplan-Meier	No	0.008	NP (NDs)
Antimony (mg/L)	DGWC-40	0.003	0.00033	0.006	No	14	0.002809	0.0007136	92.86	None	No	0.01	NP (NDs)
Antimony (mg/L)	DGWC-67	0.003	0.0023	0.006	No	14	0.002607	0.000874	78.57	None	No	0.01	NP (NDs)
Antimony (mg/L)	DGWC-68A	0.003	0.0008	0.006	No	14	0.002651	0.000891	85.71	None	No	0.01	NP (NDs)
Antimony (mg/L)	DGWC-69	0.003	0.0019	0.006	No	15	0.002693	0.0006829	80	None	No	0.01	NP (NDs)
Arsenic (mg/L)	DGWC-37	0.005	0.0019	0.01	No	15	0.004793	0.0008004	93.33	None	No	0.01	NP (NDs)
Arsenic (mg/L)	DGWC-38	0.005	0.0005	0.01	No	15	0.0047	0.001162	93.33	None	No	0.01	NP (NDs)
Arsenic (mg/L)	DGWC-39	0.005	0.0007	0.01	No	15	0.003019	0.002198	53.33	None	No	0.01	NP (NDs)
Arsenic (mg/L)	DGWC-40	0.005	0.0011	0.01	No	15	0.004157	0.001749	80	None	No	0.01	NP (NDs)
Arsenic (mg/L)	DGWC-67	0.005	0.0008	0.01	No	15	0.004415	0.001546	86.67	None	No	0.01	NP (NDs)
Arsenic (mg/L)	DGWC-68A	0.005	0.0016	0.01	No	15	0.004773	0.0008779	93.33	None	No	0.01	NP (NDs)
Arsenic (mg/L)	DGWC-69	0.0386	0.01205	0.01	Yes	17	0.03366	0.04147	0	None	ln(x)	0.01	Param.
Barium (mg/L)	B-100	0.022	0.015	2	No	4	0.02	0.003367	0	None	No	0.0625	NP (selected)
Barium (mg/L)	B-62	0.02758	0.01985	2	No	7	0.02371	0.003251	0	None	No	0.01	Param.
Barium (mg/L)	DGWC-37	0.1106	0.08922	2	No	15	0.09993	0.0158	0	None	No	0.01	Param.
Barium (mg/L)	DGWC-38	0.0336	0.032	2	No	15	0.03288	0.0009143	0	None	No	0.01	NP (normality)
Barium (mg/L)	DGWC-39	0.09601	0.08399	2	No	15	0.09	0.008868	0	None	No	0.01	Param.
Barium (mg/L)	DGWC-40	0.019	0.0168	2	No	15	0.01805	0.002624	0	None	No	0.01	NP (normality)
Barium (mg/L)	DGWC-67	0.1121	0.1001	2	No	15	0.1061	0.008863	0	None	No	0.01	Param.
Barium (mg/L)	DGWC-68A	0.09023	0.08687	2	No	15	0.08855	0.00248	0	None	No	0.01	Param.
Barium (mg/L)	DGWC-69	0.1021	0.06835	2	No	16	0.08523	0.02594	0	None	No	0.01	Param.
Beryllium (mg/L)	B-100	0.0006113	0.0002587	0.004	No	4	0.000435	0.00007767	0	None	No	0.01	Param.
Beryllium (mg/L)	B-62	0.0005	0.000078	0.004	No	8	0.0002085	0.000181	25	None	No	0.004	NP (normality)
Beryllium (mg/L)	DGWC-37	0.0005	0.000086	0.004	No	15	0.0003602	0.0002048	66.67	None	No	0.01	NP (NDs)
Beryllium (mg/L)	DGWC-38	0.0005	0.000058	0.004	No	15	0.0004705	0.0001141	93.33	None	No	0.01	NP (NDs)
Beryllium (mg/L)	DGWC-40	0.003315	0.002898	0.004	No	15	0.003107	0.0003081	6.667	None	No	0.01	Param.
Beryllium (mg/L)	DGWC-68A	0.0005	0.000084	0.004	No	15	0.000443	0.0001505	86.67	None	No	0.01	NP (NDs)
Beryllium (mg/L)	DGWC-69	0.0005	0.000061	0.004	No	16	0.0003361	0.0002186	62.5	None	No	0.01	NP (NDs)
Cadmium (mg/L)	B-100	0.00059	0.00027	0.005	No	4	0.000355	0.000157	0	None	No	0.0625	NP (normality)
Cadmium (mg/L)	DGWC-37	0.0005	0.00013	0.005	No	15	0.0003867	0.0001705	66.67	None	No	0.01	NP (NDs)
Cadmium (mg/L)	DGWC-38	0.0005	0.00017	0.005	No	15	0.00034	0.0002553	20	None	No	0.01	NP (normality)
Cadmium (mg/L)	DGWC-40	0.0008845	0.0007248	0.005	No	15	0.0008047	0.0001178	13.33	None	No	0.01	Param.
Cadmium (mg/L)	DGWC-67	0.00053	0.00018	0.005	No	15	0.000416	0.0001495	66.67	None	No	0.01	NP (NDs)
Cadmium (mg/L)	DGWC-68A	0.001	0.00017	0.005	No	15	0.000388	0.0002332	53.33	None	No	0.01	NP (NDs)
Cadmium (mg/L)	DGWC-69	0.0005	0.0002	0.005	No	16	0.0004169	0.0001502	75	None	No	0.01	NP (NDs)
Chromium (mg/L)	B-100	0.001223	0.0003828	0.1	No	4	0.002877	0.002456	50	Kaplan-Meier	sqrt(x)	0.01	Param.
Chromium (mg/L)	B-62	0.005	0.00098	0.1	No	7	0.004426	0.001519	85.71	Kaplan-Meier	No	0.008	NP (NDs)
Chromium (mg/L)	DGWC-37	0.005	0.0007	0.1	No	15	0.004419	0.001534	86.67	None	No	0.01	NP (NDs)
Chromium (mg/L)	DGWC-38	0.005	0.00092	0.1	No	15	0.004124	0.001816	80	None	No	0.01	NP (NDs)
Chromium (mg/L)	DGWC-40	0.005	0.00061	0.1	No	15	0.002267	0.002034	33.33	None	No	0.01	NP (normality)
Chromium (mg/L)	DGWC-67	0.005	0.00088	0.1	No	15	0.003899	0.001899	73.33	None	No	0.01	NP (NDs)
Chromium (mg/L)	DGWC-68A	0.005	0.0005	0.1	No	15	0.0047	0.001162	93.33	None	No	0.01	NP (NDs)
Chromium (mg/L)	DGWC-69	0.005	0.0011	0.1	No	16	0.003981	0.001829	75	None	No	0.01	NP (NDs)
Cobalt (mg/L)	B-100	0.087	0.029	0.032	No	6	0.058	0.02804	0	None	No	0.0155	NP (selected)
Cobalt (mg/L)	B-62	0.005	0.0003	0.032	No	7	0.003659	0.002291	71.43	None	No	0.008	NP (NDs)
Cobalt (mg/L)	DGWC-37	0.005	0.0005	0.032	No	15	0.004073	0.001919	80	None	No	0.01	NP (NDs)
Cobalt (mg/L)	DGWC-38	0.0017	0.0015	0.032	No	15	0.002353	0.002296	13.33	None	No	0.01	NP (normality)
Cobalt (mg/L)	DGWC-39	0.007286	0.005895	0.032	No	15	0.006633	0.001136	13.33	None	ln(x)	0.01	Param.
Cobalt (mg/L)	DGWC-40	0.04576	0.03776	0.032	Yes	15	0.04176	0.005898	0	None	No	0.01	Param.
Cobalt (mg/L)	DGWC-67	0.003862	0.001505	0.032	No	15	0.003087	0.002508	13.33	None	ln(x)	0.01	Param.
Cobalt (mg/L)	DGWC-68A	0.005	0.0015	0.032	No	15	0.004153	0.00177	80	None	No	0.01	NP (NDs)
Cobalt (mg/L)	DGWC-69	0.005	0.0016	0.032	No	16	0.003812	0.001698	62.5	None	No	0.01	NP (NDs)

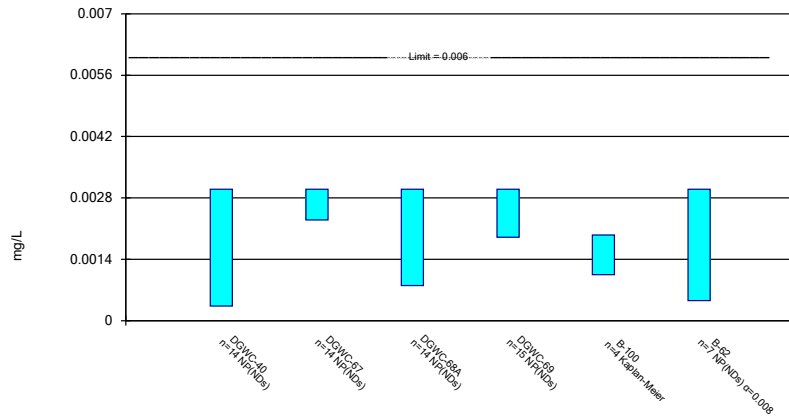
State Confidence Intervals - All Results

Plant McDonough Client: Southern Company Data: McDonough AP Printed 12/16/2021, 2:32 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Combined Radium 226 + 228 (pCi/L)	B-100	1.4	0.168	5.61	No	4	0.7853	0.5031	0	None	No	0.0625	NP (selected)
Combined Radium 226 + 228 (pCi/L)	B-62	2.02	1.173	5.61	No	6	1.597	0.3082	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	DGWC-37	1.115	0.5395	5.61	No	15	0.8273	0.4247	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	DGWC-38	1.193	0.3928	5.61	No	15	0.7931	0.5907	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	DGWC-39	1.353	0.6709	5.61	No	15	1.012	0.5031	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	DGWC-40	1.546	0.6118	5.61	No	15	1.079	0.6893	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	DGWC-67	0.996	0.4419	5.61	No	15	0.7189	0.4089	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	DGWC-68A	1.426	0.5976	5.61	No	15	1.012	0.6109	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	DGWC-69	1.844	1.178	5.61	No	16	1.511	0.5122	0	None	No	0.01	Param.
Fluoride, total (mg/L)	B-62	0.3546	0.06003	4	No	6	0.1855	0.1295	0	None	x^(1/3)	0.01	Param.
Fluoride, total (mg/L)	DGWC-37	0.21	0.054	4	No	16	0.1014	0.07777	6.25	None	No	0.01	NP (normality)
Fluoride, total (mg/L)	DGWC-38	0.23	0.057	4	No	16	0.1214	0.1131	12.5	None	No	0.01	NP (normality)
Fluoride, total (mg/L)	DGWC-39	0.17	0.083	4	No	16	0.1576	0.1194	6.25	None	No	0.01	NP (normality)
Fluoride, total (mg/L)	DGWC-40	0.3219	0.1358	4	No	16	0.2409	0.1592	6.25	None	sqrt(x)	0.01	Param.
Fluoride, total (mg/L)	DGWC-67	0.07	0.038	4	No	16	0.08794	0.1217	50	None	No	0.01	NP (normality)
Fluoride, total (mg/L)	DGWC-68A	0.23	0.076	4	No	16	0.1544	0.1295	6.25	None	No	0.01	NP (normality)
Fluoride, total (mg/L)	DGWC-69	0.1805	0.09325	4	No	17	0.1369	0.06963	5.882	None	No	0.01	Param.
Lead (mg/L)	B-100	0.0003036	0.00005528	0.001	No	4	0.0003695	0.0004235	25	Kaplan-Meier	sqrt(x)	0.01	Param.
Lead (mg/L)	DGWC-37	0.0014	0.000061	0.001	No	15	0.0009641	0.0002702	86.67	None	No	0.01	NP (NDs)
Lead (mg/L)	DGWC-38	0.001	0.0001	0.001	No	15	0.000701	0.0004381	66.67	None	No	0.01	NP (NDs)
Lead (mg/L)	DGWC-39	0.001	0.00022	0.001	No	15	0.0008867	0.0003003	86.67	None	No	0.01	NP (NDs)
Lead (mg/L)	DGWC-40	0.001	0.00007	0.001	No	15	0.0005283	0.0004602	46.67	None	No	0.01	NP (normality)
Lead (mg/L)	DGWC-67	0.001	0.00009	0.001	No	15	0.0007629	0.0004094	73.33	None	No	0.01	NP (NDs)
Lead (mg/L)	DGWC-68A	0.001	0.00035	0.001	No	15	0.0008945	0.0002836	86.67	None	No	0.01	NP (NDs)
Lead (mg/L)	DGWC-69	0.001	0.00009	0.001	No	16	0.0006631	0.0004498	62.5	None	No	0.01	NP (NDs)
Lithium (mg/L)	B-100	0.003519	0.0007815	0.03	No	4	0.00215	0.0006028	0	None	No	0.01	Param.
Lithium (mg/L)	B-62	0.03	0.0078	0.03	No	7	0.01154	0.008158	14.29	None	No	0.008	NP (normality)
Lithium (mg/L)	DGWC-37	0.03	0.0021	0.03	No	15	0.009707	0.01267	26.67	None	No	0.01	NP (normality)
Lithium (mg/L)	DGWC-38	0.0035	0.0029	0.03	No	15	0.005	0.00692	6.667	None	No	0.01	NP (normality)
Lithium (mg/L)	DGWC-40	0.003	0.0022	0.03	No	15	0.00602	0.009739	13.33	None	No	0.01	NP (normality)
Lithium (mg/L)	DGWC-67	0.0052	0.0043	0.03	No	15	0.00634	0.006555	6.667	None	No	0.01	NP (normality)
Lithium (mg/L)	DGWC-68A	0.03	0.0016	0.03	No	15	0.02616	0.01013	86.67	None	No	0.01	NP (NDs)
Lithium (mg/L)	DGWC-69	0.0032	0.0024	0.03	No	16	0.004525	0.006804	6.25	None	No	0.01	NP (normality)
Mercury (mg/L)	DGWC-37	0.0002	0.000091	0.002	No	14	0.0001711	0.00005824	78.57	None	No	0.01	NP (NDs)
Mercury (mg/L)	DGWC-38	0.0002	0.000085	0.002	No	14	0.0001711	0.00005818	78.57	None	No	0.01	NP (NDs)
Mercury (mg/L)	DGWC-39	0.0002	0.000059	0.002	No	14	0.0001899	0.00003768	92.86	None	No	0.01	NP (NDs)
Mercury (mg/L)	DGWC-40	0.0002	0.00009	0.002	No	14	0.0001699	0.00006064	78.57	None	No	0.01	NP (NDs)
Mercury (mg/L)	DGWC-67	0.0002	0.00007	0.002	No	14	0.0001907	0.00003474	92.86	None	No	0.01	NP (NDs)
Mercury (mg/L)	DGWC-68A	0.0002	0.00007	0.002	No	14	0.0001907	0.00003474	92.86	None	No	0.01	NP (NDs)
Mercury (mg/L)	DGWC-69	0.0002	0.00007	0.002	No	15	0.0001913	0.00003357	93.33	None	No	0.01	NP (NDs)
Molybdenum (mg/L)	DGWC-38	0.01	0.00099	0.041	No	15	0.005219	0.004629	46.67	None	No	0.01	NP (normality)
Molybdenum (mg/L)	DGWC-68A	0.2226	0.1942	0.041	Yes	15	0.2089	0.02252	0	None	ln(x)	0.01	Param.
Molybdenum (mg/L)	DGWC-69	0.01236	0.006699	0.041	No	16	0.01023	0.005862	6.25	None	ln(x)	0.01	Param.
Selenium (mg/L)	B-100	0.005	0.0019	0.05	No	4	0.004225	0.00155	75	Kaplan-Meier	No	0.0625	NP (NDs)
Selenium (mg/L)	DGWC-38	0.005	0.0019	0.05	No	15	0.004793	0.0008004	93.33	None	No	0.01	NP (NDs)
Selenium (mg/L)	DGWC-40	0.003517	0.001857	0.05	No	15	0.003607	0.002356	20	Kaplan-Meier	x^(1/3)	0.01	Param.
Selenium (mg/L)	DGWC-67	0.005	0.0027	0.05	No	15	0.004847	0.0005939	93.33	Kaplan-Meier	No	0.01	NP (NDs)
Selenium (mg/L)	DGWC-68A	0.005	0.0017	0.05	No	15	0.00478	0.0008521	93.33	Kaplan-Meier	No	0.01	NP (NDs)
Thallium (mg/L)	DGWC-38	0.001	0.0001	0.002	No	15	0.000534	0.0004517	46.67	None	No	0.01	NP (normality)
Thallium (mg/L)	DGWC-39	0.001	0.00009	0.002	No	15	0.0006953	0.0004461	66.67	None	No	0.01	NP (NDs)
Thallium (mg/L)	DGWC-40	0.001	0.000068	0.002	No	15	0.0006885	0.0004559	66.67	None	No	0.01	NP (NDs)
Thallium (mg/L)	DGWC-68A	0.001	0.00015	0.002	No	15	0.0009433	0.0002195	93.33	None	No	0.01	NP (NDs)

Parametric and Non-Parametric (NP) Confidence Interval

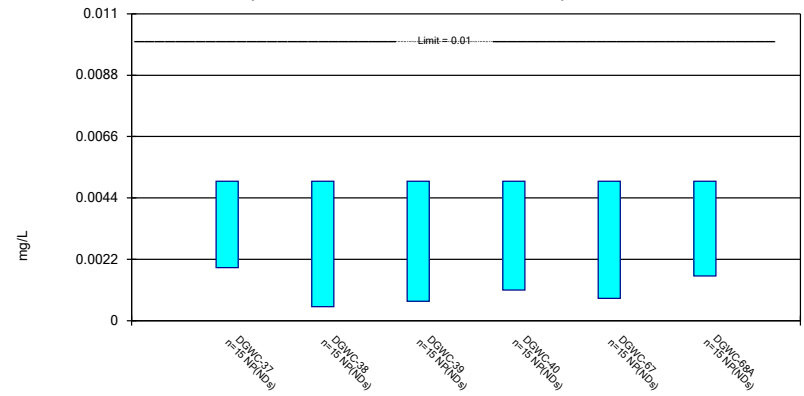
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Antimony Analysis Run 12/16/2021 2:31 PM View: AP 1 Confidence Intervals
 Plant McDonough Client: Southern Company Data: McDonough AP

Non-Parametric Confidence Interval

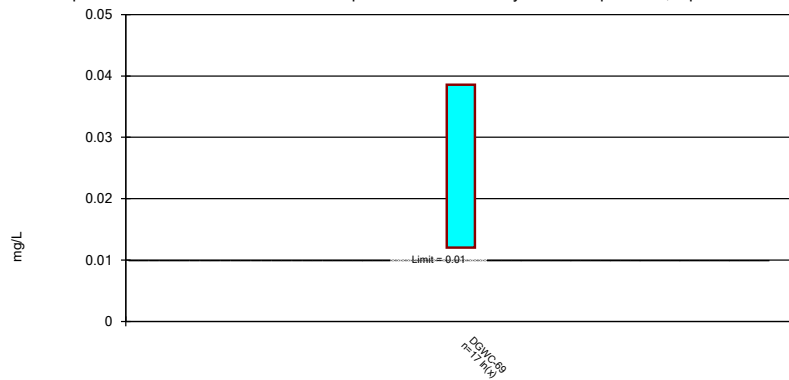
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Constituent: Arsenic Analysis Run 12/16/2021 2:31 PM View: AP 1 Confidence Intervals
 Plant McDonough Client: Southern Company Data: McDonough AP

Parametric Confidence Interval

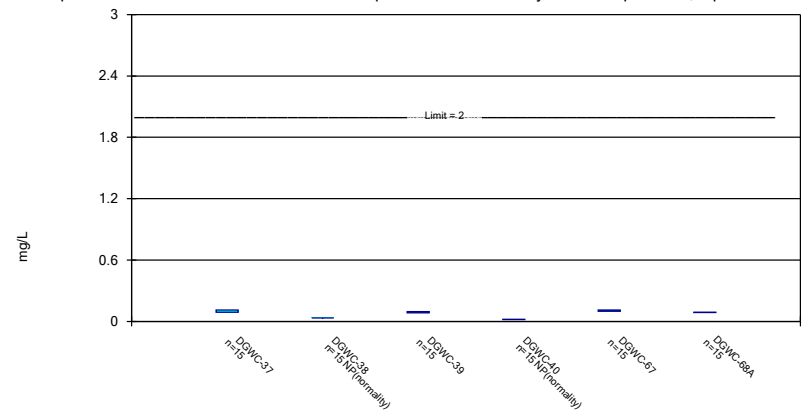
Compliance limit is exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Arsenic Analysis Run 12/16/2021 2:31 PM View: AP 1 Confidence Intervals
 Plant McDonough Client: Southern Company Data: McDonough AP

Parametric and Non-Parametric (NP) Confidence Interval

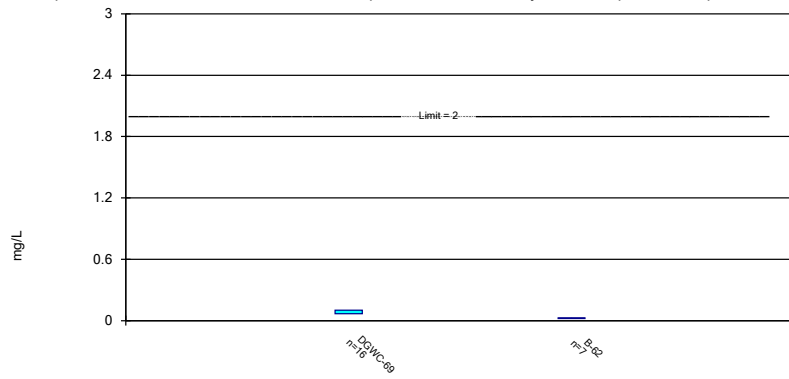
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Barium Analysis Run 12/16/2021 2:31 PM View: AP 1 Confidence Intervals
 Plant McDonough Client: Southern Company Data: McDonough AP

Parametric Confidence Interval

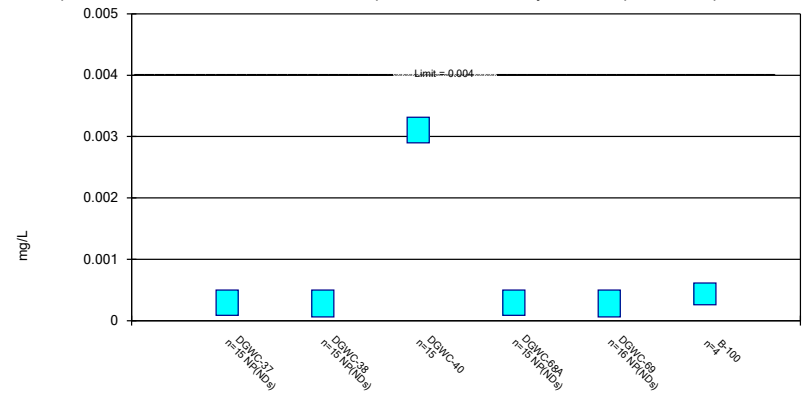
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Barium Analysis Run 12/16/2021 2:31 PM View: AP 1 Confidence Intervals
Plant McDonough Client: Southern Company Data: McDonough AP

Parametric and Non-Parametric (NP) Confidence Interval

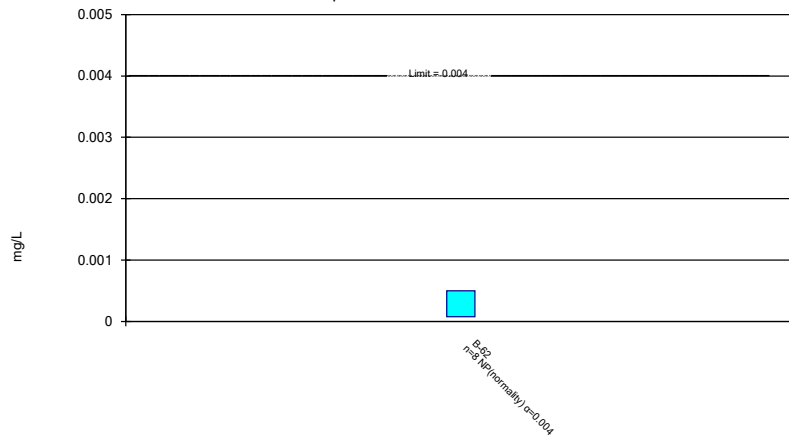
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Beryllium Analysis Run 12/16/2021 2:31 PM View: AP 1 Confidence Intervals
Plant McDonough Client: Southern Company Data: McDonough AP

Non-Parametric Confidence Interval

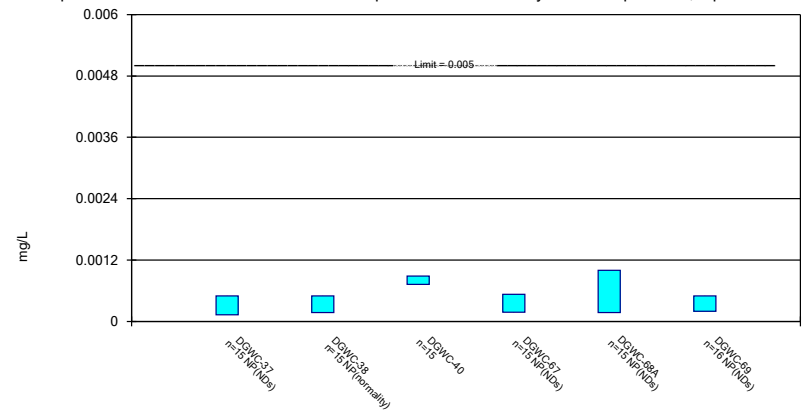
Compliance Limit is not exceeded.



Constituent: Beryllium Analysis Run 12/16/2021 2:31 PM View: AP 1 Confidence Intervals
Plant McDonough Client: Southern Company Data: McDonough AP

Parametric and Non-Parametric (NP) Confidence Interval

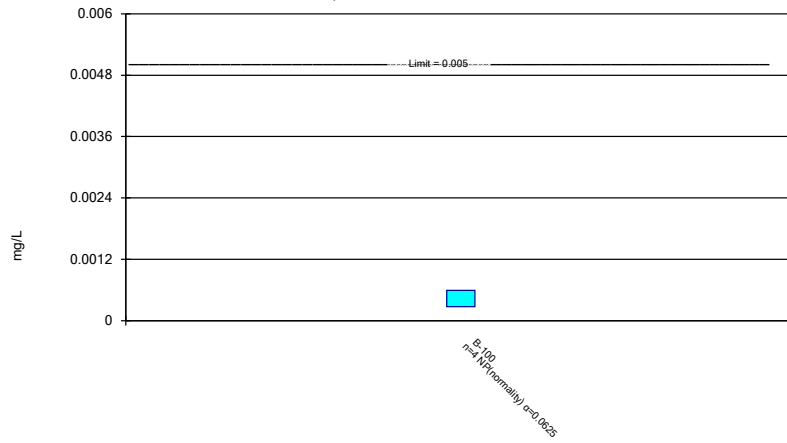
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Cadmium Analysis Run 12/16/2021 2:31 PM View: AP 1 Confidence Intervals
Plant McDonough Client: Southern Company Data: McDonough AP

Non-Parametric Confidence Interval

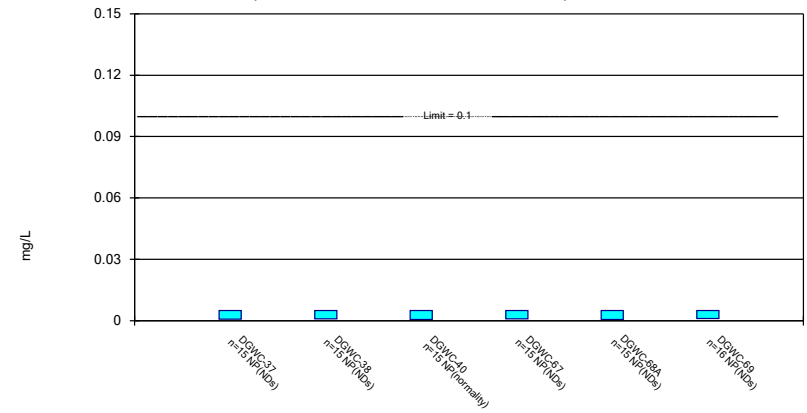
Compliance Limit is not exceeded.



Constituent: Cadmium Analysis Run 12/16/2021 2:31 PM View: AP 1 Confidence Intervals
Plant McDonough Client: Southern Company Data: McDonough AP

Non-Parametric Confidence Interval

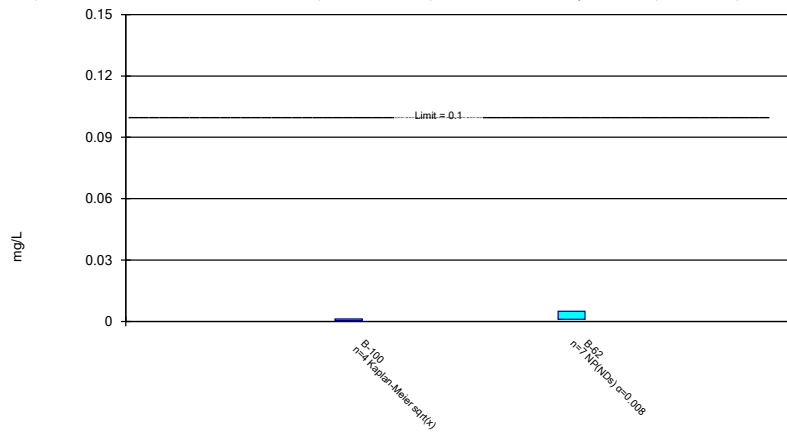
Compliance Limit is not exceeded. Per-well alpha = 0.01.



Constituent: Chromium Analysis Run 12/16/2021 2:31 PM View: AP 1 Confidence Intervals
Plant McDonough Client: Southern Company Data: McDonough AP

Parametric and Non-Parametric (NP) Confidence Interval

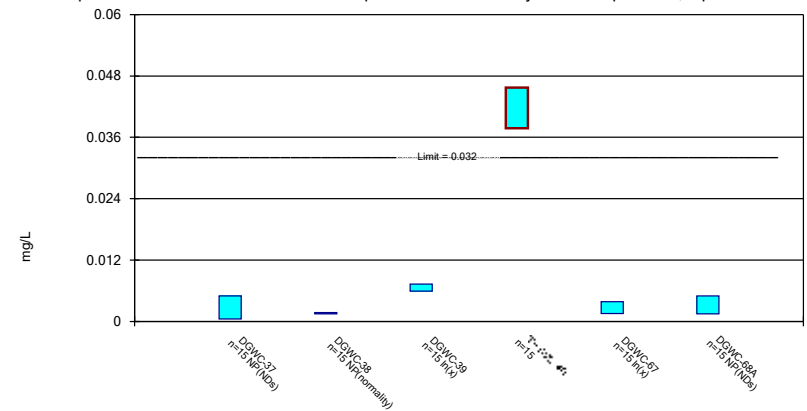
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Chromium Analysis Run 12/16/2021 2:31 PM View: AP 1 Confidence Intervals
Plant McDonough Client: Southern Company Data: McDonough AP

Parametric and Non-Parametric (NP) Confidence Interval

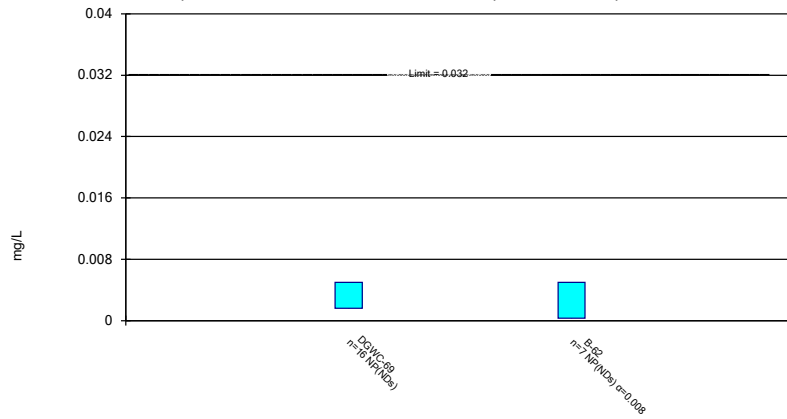
Compliance limit is exceeded.* Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Cobalt Analysis Run 12/16/2021 2:31 PM View: AP 1 Confidence Intervals
Plant McDonough Client: Southern Company Data: McDonough AP

Non-Parametric Confidence Interval

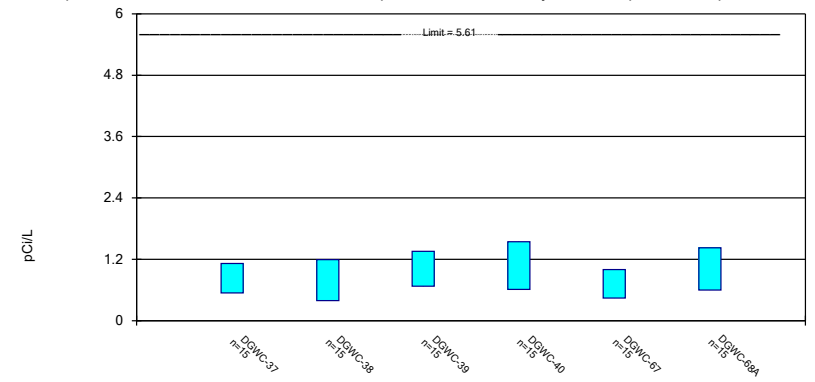
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted.



Constituent: Cobalt Analysis Run 12/16/2021 2:31 PM View: AP 1 Confidence Intervals
Plant McDonough Client: Southern Company Data: McDonough AP

Parametric Confidence Interval

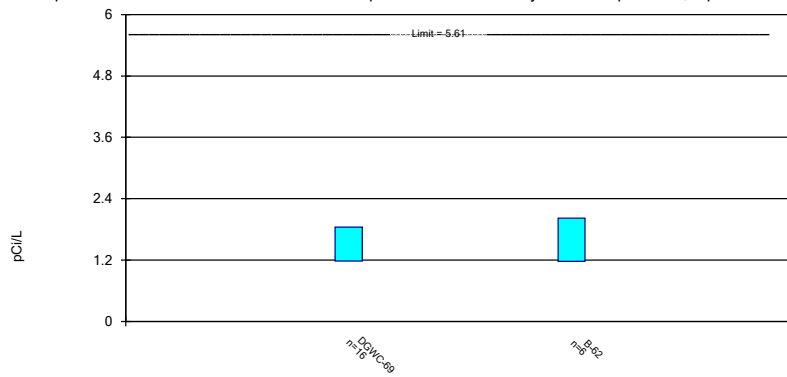
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Combined Radium 226 + 228 Analysis Run 12/16/2021 2:31 PM View: AP 1 Confidence Inter
Plant McDonough Client: Southern Company Data: McDonough AP

Parametric Confidence Interval

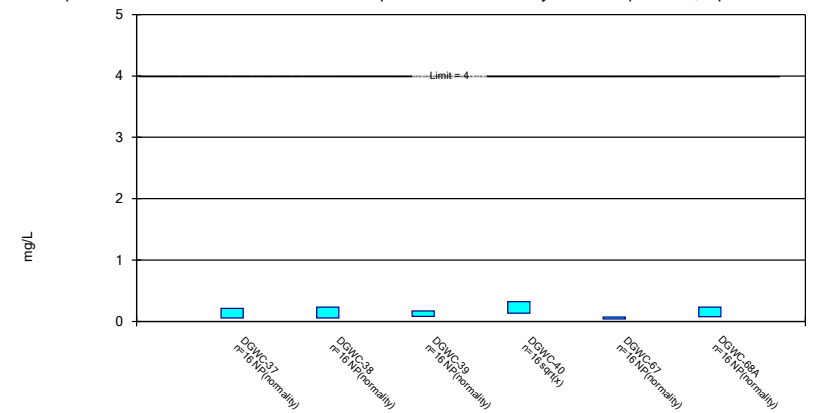
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Combined Radium 226 + 228 Analysis Run 12/16/2021 2:31 PM View: AP 1 Confidence Inter
Plant McDonough Client: Southern Company Data: McDonough AP

Parametric and Non-Parametric (NP) Confidence Interval

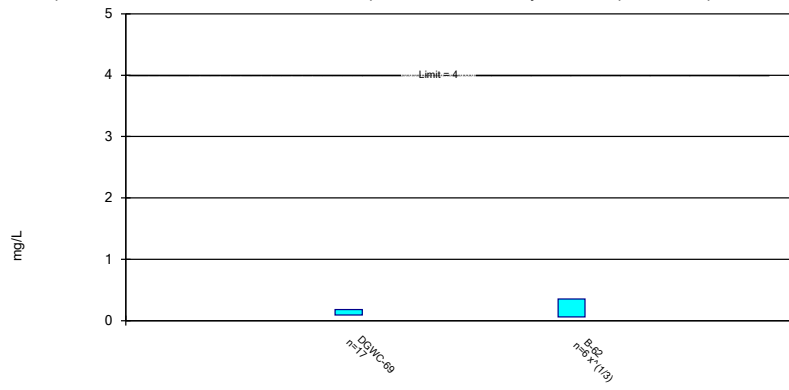
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Fluoride, total Analysis Run 12/16/2021 2:31 PM View: AP 1 Confidence Intervals
Plant McDonough Client: Southern Company Data: McDonough AP

Parametric Confidence Interval

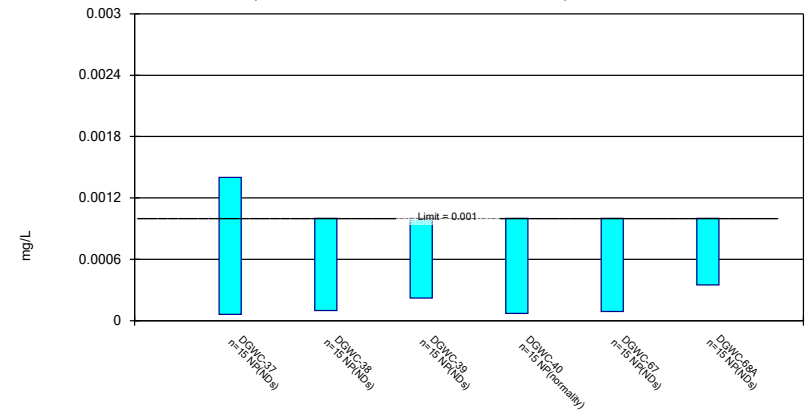
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Fluoride, total Analysis Run 12/16/2021 2:31 PM View: AP 1 Confidence Intervals
Plant McDonough Client: Southern Company Data: McDonough AP

Non-Parametric Confidence Interval

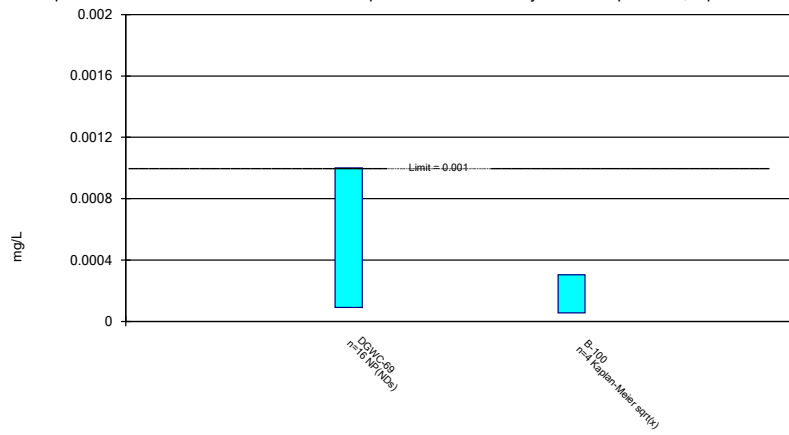
Compliance Limit is not exceeded. Per-well alpha = 0.01.



Constituent: Lead Analysis Run 12/16/2021 2:31 PM View: AP 1 Confidence Intervals
Plant McDonough Client: Southern Company Data: McDonough AP

Parametric and Non-Parametric (NP) Confidence Interval

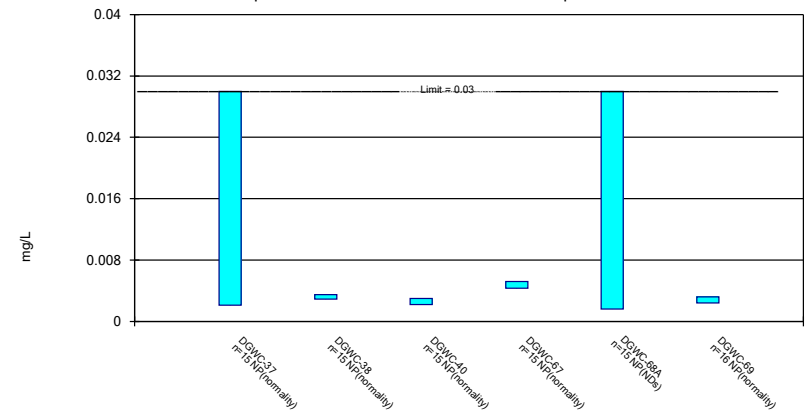
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Lead Analysis Run 12/16/2021 2:31 PM View: AP 1 Confidence Intervals
Plant McDonough Client: Southern Company Data: McDonough AP

Non-Parametric Confidence Interval

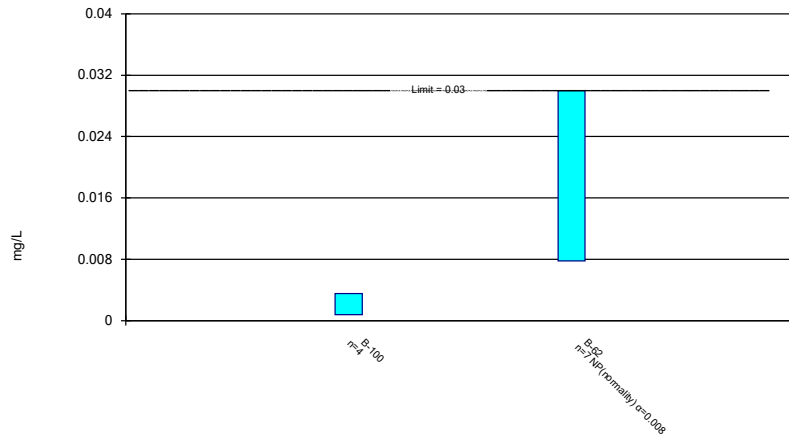
Compliance Limit is not exceeded. Per-well alpha = 0.01.



Constituent: Lithium Analysis Run 12/16/2021 2:31 PM View: AP 1 Confidence Intervals
Plant McDonough Client: Southern Company Data: McDonough AP

Parametric and Non-Parametric (NP) Confidence Interval

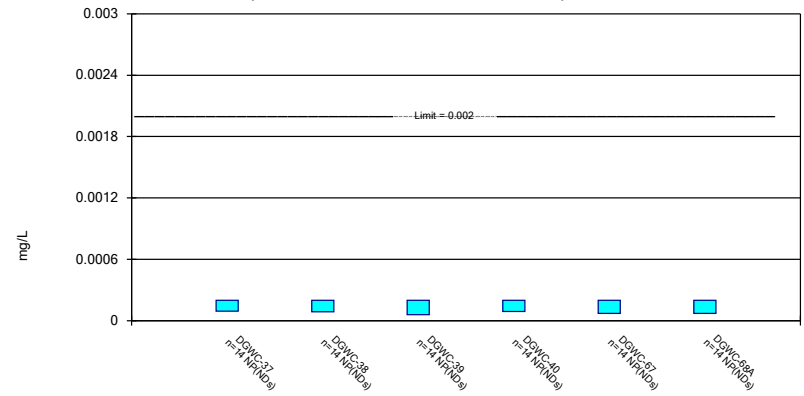
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Lithium Analysis Run 12/16/2021 2:31 PM View: AP 1 Confidence Intervals
 Plant McDonough Client: Southern Company Data: McDonough AP

Non-Parametric Confidence Interval

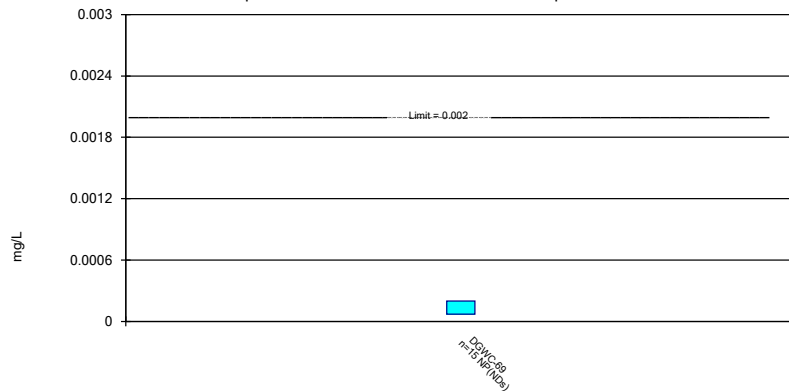
Compliance Limit is not exceeded. Per-well alpha = 0.01.



Constituent: Mercury Analysis Run 12/16/2021 2:31 PM View: AP 1 Confidence Intervals
 Plant McDonough Client: Southern Company Data: McDonough AP

Non-Parametric Confidence Interval

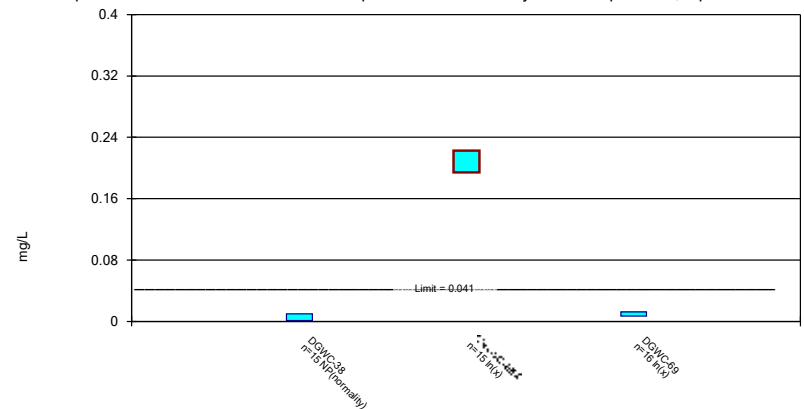
Compliance Limit is not exceeded. Per-well alpha = 0.01.



Constituent: Mercury Analysis Run 12/16/2021 2:31 PM View: AP 1 Confidence Intervals
 Plant McDonough Client: Southern Company Data: McDonough AP

Parametric and Non-Parametric (NP) Confidence Interval

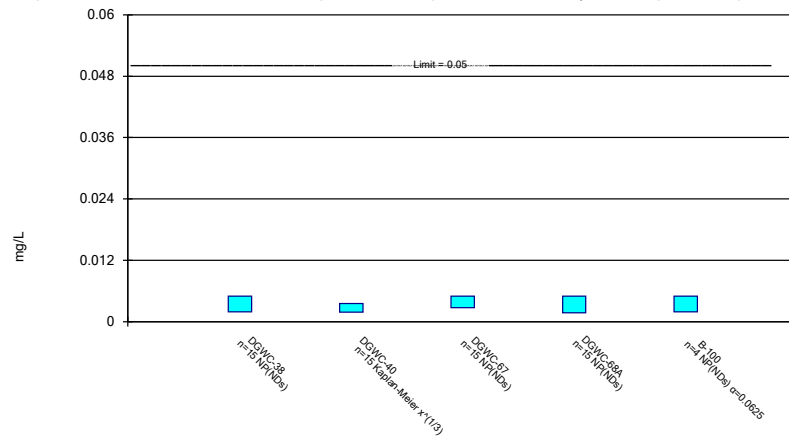
Compliance limit is exceeded.* Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Molybdenum Analysis Run 12/16/2021 2:31 PM View: AP 1 Confidence Intervals
 Plant McDonough Client: Southern Company Data: McDonough AP

Parametric and Non-Parametric (NP) Confidence Interval

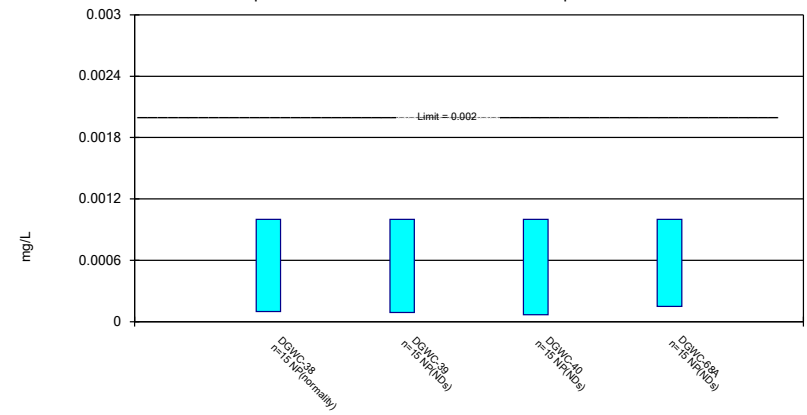
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Selenium Analysis Run 12/16/2021 2:31 PM View: AP 1 Confidence Intervals
 Plant McDonough Client: Southern Company Data: McDonough AP

Non-Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01.



Constituent: Thallium Analysis Run 12/16/2021 2:31 PM View: AP 1 Confidence Intervals
 Plant McDonough Client: Southern Company Data: McDonough AP

Confidence Interval

Constituent: Antimony (mg/L) Analysis Run 12/16/2021 2:32 PM View: AP 1 Confidence Intervals

Plant McDonough Client: Southern Company Data: McDonough AP

	DGWC-40	DGWC-67	DGWC-68A	DGWC-69	B-100	B-62
9/2/2016	<0.003					
12/8/2016	<0.003					
3/30/2017	<0.003					
3/31/2017		0.0004 (J)		<0.003		
5/12/2017		<0.003	<0.003	<0.003		
6/16/2017		0.0008 (J)	0.0008 (J)	0.0007 (J)		
7/13/2017	<0.003	<0.003	<0.003	<0.003		
8/8/2017			<0.003			
10/26/2017	<0.003	<0.003	<0.003	<0.003		
11/15/2017				<0.003		
3/2/2018	<0.003	<0.003	<0.003	<0.003		
7/12/2018	<0.003					
7/13/2018		0.0023 (J)	<0.003	<0.003		
11/8/2018	<0.003	<0.003	<0.003	<0.003		
1/30/2019						<0.003
8/28/2019	<0.003	<0.003	<0.003	<0.003		
9/11/2019						<0.003
10/21/2019						<0.003
3/4/2020	<0.003					
3/9/2020		<0.003	<0.003	<0.003		
8/13/2020	<0.003	<0.003	<0.003	0.0019 (J)		<0.003
8/17/2020					0.0013 (J)	
9/23/2020	<0.003	<0.003	<0.003	<0.003		
9/24/2020						0.00046 (J)
9/25/2020					<0.003	
3/8/2021	0.00033 (J)				0.0017 (J)	
3/10/2021			0.00032 (J)	0.0018 (J)		
3/11/2021		<0.003				
3/12/2021						<0.003
9/9/2021						<0.003
9/13/2021					<0.003	
9/14/2021	<0.003					
9/16/2021		<0.003	<0.003	<0.003		
Mean	0.002809	0.002607	0.002651	0.002693	0.00225	0.002637
Std. Dev.	0.0007136	0.000874	0.000891	0.0006829	0.0008813	0.00096
Upper Lim.	0.003	0.003	0.003	0.003	0.001954	0.003
Lower Lim.	0.00033	0.0023	0.0008	0.0019	0.001046	0.00046

Confidence Interval

Constituent: Arsenic (mg/L) Analysis Run 12/16/2021 2:32 PM View: AP 1 Confidence Intervals

Plant McDonough Client: Southern Company Data: McDonough AP

	DGWC-37	DGWC-38	DGWC-39	DGWC-40	DGWC-67	DGWC-68A
9/2/2016				<0.005		
9/8/2016	<0.005	<0.005	<0.005			
12/7/2016	0.0019 (J)	<0.005	<0.005			
12/8/2016				<0.005		
3/30/2017	<0.005	<0.005	0.0007 (J)	0.0006 (J)		
3/31/2017					<0.005	
5/12/2017					<0.005	<0.005
6/16/2017					<0.005	<0.005
7/13/2017	<0.005	0.0005 (J)	0.0009 (J)	<0.005	<0.005	<0.005
8/8/2017						<0.005
10/26/2017	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
3/1/2018	<0.005	<0.005	0.0011 (J)			
3/2/2018				0.0011 (J)	<0.005	<0.005
7/12/2018	<0.005	<0.005	0.00057 (J)	<0.005		
7/13/2018					<0.005	<0.005
11/8/2018	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005 (J)
8/28/2019	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
10/16/2019						<0.005
10/17/2019					0.00042 (J)	
10/18/2019	<0.005	<0.005	0.00075 (J)	<0.005		
3/4/2020				0.00065 (J)		
3/9/2020	<0.005	<0.005	0.00039 (J)		<0.005	<0.005
8/13/2020	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
9/23/2020				<0.005	<0.005	<0.005
9/24/2020	<0.005	<0.005				
9/25/2020			0.00087 (J)			
3/8/2021				<0.005		
3/10/2021						<0.005
3/11/2021	<0.005	<0.005	<0.005		0.0008 (J)	
9/14/2021				<0.005		
9/15/2021		<0.005				
9/16/2021	<0.005				<0.005	0.46 (o)
9/17/2021			<0.005			
10/27/2021						0.0016 (J)
Mean	0.004793	0.0047	0.003019	0.004157	0.004415	0.004773
Std. Dev.	0.0008004	0.001162	0.002198	0.001749	0.001546	0.0008779
Upper Lim.	0.005	0.005	0.005	0.005	0.005	0.005
Lower Lim.	0.0019	0.0005	0.0007	0.0011	0.0008	0.0016

Confidence Interval

Constituent: Arsenic (mg/L) Analysis Run 12/16/2021 2:32 PM View: AP 1 Confidence Intervals
Plant McDonough Client: Southern Company Data: McDonough AP

	DGWC-69
3/31/2017	0.0239
4/12/2017	0.0077
5/12/2017	0.0097
6/16/2017	0.0113
7/13/2017	0.0029 (J)
10/26/2017	0.114
11/15/2017	0.164
3/2/2018	0.0127
7/13/2018	0.017
11/8/2018	0.02
8/28/2019	0.025
10/16/2019	0.023
3/9/2020	0.029
8/13/2020	0.029
9/23/2020	0.032
3/10/2021	0.028
9/16/2021	0.023
Mean	0.03366
Std. Dev.	0.04147
Upper Lim.	0.0386
Lower Lim.	0.01205

Confidence Interval

Constituent: Barium (mg/L) Analysis Run 12/16/2021 2:32 PM View: AP 1 Confidence Intervals

Plant McDonough Client: Southern Company Data: McDonough AP

	DGWC-37	DGWC-38	DGWC-39	DGWC-40	DGWC-67	DGWC-68A
9/2/2016				0.0171		
9/8/2016	0.123	0.0333	0.0978			
12/7/2016	0.125	0.0336	0.0844			
12/8/2016				0.0163		
3/30/2017	0.11	0.0325	0.0858	0.0177		
3/31/2017					0.111	
5/12/2017					0.127	0.089
6/16/2017					0.11	0.0855
7/13/2017	0.11	0.0332	0.0919	0.017	0.102	0.0859
8/8/2017						0.0852
10/26/2017	0.112	0.0333	0.0899	0.0168	0.105	0.0878
3/1/2018	0.102	0.0333	0.0742			
3/2/2018				0.0169	0.104	0.0878
7/12/2018	0.11	0.034	0.094	0.018		
7/13/2018					0.11	0.091
11/8/2018	0.11	0.035	0.1	0.017	0.11	0.092
8/28/2019	0.086	0.033	0.099	0.017	0.11	0.089
10/16/2019						0.089
10/17/2019					0.1	
10/18/2019	0.079	0.032	0.1	0.019		
3/4/2020				0.018		
3/9/2020	0.092	0.032	0.076		0.11	0.088
8/13/2020	0.088	0.032	0.089	0.018	0.095	0.088
9/23/2020				0.019	0.1	0.094
9/24/2020	0.094	0.032				
9/25/2020			0.1			
3/8/2021				0.016		
3/10/2021						0.09
3/11/2021	0.075	0.032	0.078		0.11	
9/14/2021				0.027		
9/15/2021		0.032				
9/16/2021	0.083				0.088	0.13 (o)
9/17/2021			0.09			
10/27/2021						0.086
Mean	0.09993	0.03288	0.09	0.01805	0.1061	0.08855
Std. Dev.	0.0158	0.0009143	0.008868	0.002624	0.008863	0.00248
Upper Lim.	0.1106	0.0336	0.09601	0.019	0.1121	0.09023
Lower Lim.	0.08922	0.032	0.08399	0.0168	0.1001	0.08687

Confidence Interval

Constituent: Barium (mg/L) Analysis Run 12/16/2021 2:32 PM View: AP 1 Confidence Intervals

Plant McDonough Client: Southern Company Data: McDonough AP

	DGWC-69	B-62
3/31/2017	0.0872	
5/12/2017	0.0929	
6/16/2017	0.1	
7/13/2017	0.0985	
10/26/2017	0.136	
11/15/2017	0.107	
3/2/2018	0.0671	
7/13/2018	0.074	
11/8/2018	0.072	
1/30/2019		0.018
8/28/2019	0.061	
9/11/2019		0.023
10/16/2019	0.1	
10/21/2019		0.026
3/9/2020	0.057	
8/13/2020	0.13	0.026
9/23/2020	0.055	
9/24/2020		0.025
3/10/2021	0.048	
3/12/2021		0.027
9/9/2021		0.021
9/16/2021	0.078	
Mean	0.08523	0.02371
Std. Dev.	0.02594	0.003251
Upper Lim.	0.1021	0.02758
Lower Lim.	0.06835	0.01985

Confidence Interval

Constituent: Beryllium (mg/L) Analysis Run 12/16/2021 2:32 PM View: AP 1 Confidence Intervals

Plant McDonough Client: Southern Company Data: McDonough AP

	DGWC-37	DGWC-38	DGWC-40	DGWC-68A	DGWC-69	B-100
9/2/2016			0.0028 (J)			
9/8/2016	<0.0005	<0.0005				
12/7/2016	<0.0005	<0.0005				
12/8/2016			0.0026 (J)			
3/30/2017	<0.0005	<0.0005	0.003			
3/31/2017					7E-05 (J)	
5/12/2017				<0.0005	<0.0005	
6/16/2017				<0.0005	<0.0005	
7/13/2017	<0.0005	<0.0005	0.003 (J)	<0.0005	<0.0005	
8/8/2017				<0.0005		
10/26/2017	<0.0005	<0.0005	0.0027 (J)	<0.0005	<0.0005	
11/15/2017					<0.0005	
3/1/2018	<0.0005	<0.0005				
3/2/2018			0.0033	<0.0005	<0.0005	
7/12/2018	7E-05 (J)	<0.0005	0.0032			
7/13/2018				8.4E-05 (J)	5.8E-05 (J)	
11/8/2018	<0.0005	<0.0005	<0.003 (J)	<0.0005	<0.0005	
8/28/2019	8.6E-05 (J)	<0.0005	0.0032	<0.0005	<0.0005	
10/16/2019				<0.0005	<0.0005	
10/18/2019	<0.0005	<0.0005	0.0033			
3/4/2020			0.0039			
3/9/2020	<0.0005	<0.0005		<0.0005	7.5E-05 (J)	
8/13/2020	0.0001 (J)	<0.0005	0.0033	<0.0005	6.3E-05 (J)	
8/17/2020						0.0004 (J)
9/23/2020			0.0031	<0.0005	6.1E-05 (J)	
9/24/2020	8.8E-05 (J)	5.8E-05 (J)				
9/25/2020						0.00035 (J)
3/8/2021			0.003			0.00046 (J)
3/10/2021				6.1E-05 (J)	5E-05 (J)	
3/11/2021	<0.0005	<0.0005				
9/13/2021						0.00053
9/14/2021			0.0032			
9/15/2021		<0.0005				
9/16/2021	5.9E-05 (J)			<0.0005	<0.0005	
Mean	0.0003602	0.0004705	0.003107	0.000443	0.0003361	0.000435
Std. Dev.	0.0002048	0.0001141	0.0003081	0.0001505	0.0002186	7.767E-05
Upper Lim.	0.0005	0.0005	0.003315	0.0005	0.0005	0.0006113
Lower Lim.	8.6E-05	5.8E-05	0.002898	8.4E-05	6.1E-05	0.0002587

Confidence Interval

Constituent: Beryllium (mg/L) Analysis Run 12/16/2021 2:32 PM View: AP 1 Confidence Intervals
Plant McDonough Client: Southern Company Data: McDonough AP

	B-62
10/6/2016	9E-05 (J)
1/30/2019	<0.0005
9/11/2019	0.00012 (J)
10/21/2019	7.8E-05 (J)
8/13/2020	0.00011 (J)
9/24/2020	0.00013 (J)
3/12/2021	<0.0005
9/9/2021	0.00014 (J)
Mean	0.0002085
Std. Dev.	0.000181
Upper Lim.	0.0005
Lower Lim.	7.8E-05

Confidence Interval

Constituent: Cadmium (mg/L) Analysis Run 12/16/2021 2:32 PM View: AP 1 Confidence Intervals

Plant McDonough Client: Southern Company Data: McDonough AP

	DGWC-37	DGWC-38	DGWC-40	DGWC-67	DGWC-68A	DGWC-69
9/2/2016			0.0008 (J)			
9/8/2016	0.0002 (J)	0.0002 (J)				
12/7/2016	0.0001 (J)	0.0002 (J)				
12/8/2016			0.0007 (J)			
3/30/2017	0.0001 (J)	0.0002 (J)	0.0007 (J)			
3/31/2017				<0.0005		0.0001 (J)
5/12/2017				<0.0005	8E-05 (J)	0.0002 (J)
6/16/2017				<0.0005	<0.0005	0.0002 (J)
7/13/2017	<0.0005	0.0002 (J)	0.0008 (J)	<0.0005	<0.0005	<0.0005
8/8/2017					<0.0005	
10/26/2017	<0.0005	0.0002 (J)	0.0008 (J)	<0.0005	<0.0005	<0.0005
11/15/2017						<0.0005
3/1/2018	<0.0005	<0.0005				
3/2/2018			<0.0005	<0.0005	<0.0005	<0.0005
7/12/2018	<0.0005	0.00024 (J)	0.00087 (J)			
7/13/2018				<0.0005	0.00019 (J)	<0.0005
11/8/2018	<0.0005	<0.001 (J)	<0.001 (J)	<0.0005	<0.001 (J)	<0.0005
8/28/2019	<0.0005	0.0003 (J)	0.00087 (J)	0.00017 (J)	0.00017 (J)	<0.0005
10/16/2019					0.00017 (J)	0.00017 (J)
10/17/2019				<0.0005		
10/18/2019	<0.0005	0.00016 (J)	0.00088 (J)			
3/4/2020			0.00093 (J)			
3/9/2020	<0.0005	0.00017 (J)		0.00021 (J)	0.00026 (J)	<0.0005
8/13/2020	<0.0005	0.00021 (J)	0.00084 (J)	0.00015 (J)	0.00021 (J)	<0.0005
9/23/2020			0.0008 (J)	0.00018 (J)	0.00024 (J)	<0.0005
9/24/2020	0.00027 (J)	0.00081 (J)				
3/8/2021			0.00072			
3/10/2021					<0.0005	<0.0005
3/11/2021	<0.0005	<0.0005		0.00053		
9/14/2021			0.00086			
9/15/2021		0.00021 (J)				
9/16/2021	0.00013 (J)			<0.0005	<0.0005	<0.0005
Mean	0.0003867	0.00034	0.0008047	0.000416	0.000388	0.0004169
Std. Dev.	0.0001705	0.0002553	0.0001178	0.0001495	0.0002332	0.0001502
Upper Lim.	0.0005	0.0005	0.0008845	0.00053	0.001	0.0005
Lower Lim.	0.00013	0.00017	0.0007248	0.00018	0.00017	0.0002

Confidence Interval

Constituent: Cadmium (mg/L) Analysis Run 12/16/2021 2:32 PM View: AP 1 Confidence Intervals
Plant McDonough Client: Southern Company Data: McDonough AP

	B-100
8/17/2020	0.00059 (J)
9/25/2020	0.00027 (J)
3/8/2021	0.00027 (J)
9/13/2021	0.00029 (J)
Mean	0.000355
Std. Dev.	0.000157
Upper Lim.	0.00059
Lower Lim.	0.00027

Confidence Interval

Constituent: Chromium (mg/L) Analysis Run 12/16/2021 2:32 PM View: AP 1 Confidence Intervals

Plant McDonough Client: Southern Company Data: McDonough AP

	DGWC-37	DGWC-38	DGWC-40	DGWC-67	DGWC-68A	DGWC-69
9/2/2016			<0.005			
9/8/2016	<0.005	<0.005				
12/7/2016	<0.005	<0.005				
12/8/2016			<0.005			
3/30/2017	<0.005	<0.005	0.0007 (J)			
3/31/2017				0.0005 (J)		<0.005
5/12/2017				0.0007 (J)	<0.005	<0.005
6/16/2017				<0.005	<0.005	<0.005
7/13/2017	<0.005	<0.005	0.0006 (J)	<0.005	0.0005 (J)	<0.005
8/8/2017					<0.005	
10/26/2017	0.0007 (J)	0.0005 (J)	0.0007 (J)	<0.005	<0.005	<0.005
11/15/2017						<0.005
3/1/2018	<0.005	<0.005				
3/2/2018			<0.005	<0.005	<0.005	<0.005
7/12/2018	<0.005	<0.005	<0.005			
7/13/2018				<0.005	<0.005	<0.005
11/8/2018	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
8/28/2019	<0.005	<0.005	0.00061 (J)	<0.005	<0.005	0.00049 (J)
10/16/2019					<0.005	<0.005
10/17/2019				<0.005		
10/18/2019	<0.005	0.00092 (J)	0.00078 (J)			
3/4/2020			0.0011 (J)			
3/9/2020	<0.005	0.00044 (J)		0.00088 (J)	<0.005	0.0012 (J)
8/13/2020	0.00058 (J)	<0.005	0.00072 (J)	<0.005	<0.005	<0.005
9/23/2020			0.0011 (J)	<0.005	<0.005	0.0011 (J)
9/24/2020	<0.005	<0.005				
3/8/2021			0.0006 (J)			
3/10/2021					<0.005	0.0009 (J)
3/11/2021	<0.005	<0.005		0.0014 (J)		
9/14/2021			0.0021 (J)			
9/15/2021		<0.005				
9/16/2021	<0.005			<0.005	0.0014 (J,o)	<0.005
10/27/2021					<0.005	
Mean	0.004419	0.004124	0.002267	0.003899	0.0047	0.003981
Std. Dev.	0.001534	0.001816	0.002034	0.001899	0.001162	0.001829
Upper Lim.	0.005	0.005	0.005	0.005	0.005	0.005
Lower Lim.	0.0007	0.00092	0.00061	0.00088	0.0005	0.0011

Confidence Interval

Constituent: Chromium (mg/L) Analysis Run 12/16/2021 2:32 PM View: AP 1 Confidence Intervals
Plant McDonough Client: Southern Company Data: McDonough AP

	B-100	B-62
1/30/2019		<0.005
9/11/2019		<0.005
10/21/2019		0.00098 (J)
8/13/2020		<0.005
8/17/2020	<0.005	
9/24/2020		<0.005
9/25/2020	0.00094 (J)	
3/8/2021	0.00057 (J)	
3/12/2021		<0.005
9/9/2021		<0.005
9/13/2021	<0.005	
Mean	0.002877	0.004426
Std. Dev.	0.002456	0.001519
Upper Lim.	0.001223	0.005
Lower Lim.	0.0003828	0.00098

Confidence Interval

Constituent: Cobalt (mg/L) Analysis Run 12/16/2021 2:32 PM View: AP 1 Confidence Intervals

Plant McDonough Client: Southern Company Data: McDonough AP

	DGWC-37	DGWC-38	DGWC-39	DGWC-40	DGWC-67	DGWC-68A
9/2/2016				0.0382		
9/8/2016	<0.005	0.0015 (J)	0.0068 (J)			
12/7/2016	0.0005 (J)	0.0017 (J)	0.0071 (J)			
12/8/2016				0.0318		
3/30/2017	<0.005	0.0016 (J)	0.006 (J)	0.0364		
3/31/2017					0.0064 (J)	
5/12/2017					0.0037 (J)	0.0015 (J)
6/16/2017					0.0041 (J)	0.0003 (J)
7/13/2017	0.0003 (J)	0.0016 (J)	0.0063 (J)	0.0394	0.0037 (J)	0.0005 (J)
8/8/2017						<0.005
10/26/2017	0.0003 (J)	0.0016 (J)	0.0062 (J)	0.0371	0.0022 (J)	<0.005
3/1/2018	<0.005	<0.005	<0.005			
3/2/2018				0.0425	<0.005	<0.005
7/12/2018	<0.005	0.0015 (J)	0.0059 (J)	0.044		
7/13/2018					0.0017 (J)	<0.005
11/8/2018	<0.005	<0.01 (J)	<0.01 (J)	0.036	<0.01 (J)	<0.005
8/28/2019	<0.005	0.0016 (J)	0.0067	0.044	0.0013 (J)	<0.005
10/16/2019						<0.005
10/17/2019					0.0013 (J)	
10/18/2019	<0.005	0.0016 (J)	0.007	0.043		
3/4/2020				0.055		
3/9/2020	<0.005	0.0016 (J)	0.007		0.0015 (J)	<0.005
8/13/2020	<0.005	0.0014 (J)	0.006	0.044	0.0015 (J)	<0.005
9/23/2020				0.046	0.0011 (J)	<0.005
9/24/2020	<0.005	0.0013 (J)				
9/25/2020			0.0061			
3/8/2021				0.039		
3/10/2021						<0.005
3/11/2021	<0.005	0.0017 (J)	0.0058		0.0016 (J)	
9/14/2021				0.05		
9/15/2021		0.0016 (J)				
9/16/2021	<0.005				0.0012 (J)	0.0032 (J,o)
9/17/2021			0.0076			
10/27/2021						<0.005
Mean	0.004073	0.002353	0.006633	0.04176	0.003087	0.004153
Std. Dev.	0.001919	0.002296	0.001136	0.005898	0.002508	0.00177
Upper Lim.	0.005	0.0017	0.007286	0.04576	0.003862	0.005
Lower Lim.	0.0005	0.0015	0.005895	0.03776	0.001505	0.0015

Confidence Interval

Constituent: Cobalt (mg/L) Analysis Run 12/16/2021 2:32 PM View: AP 1 Confidence Intervals
Plant McDonough Client: Southern Company Data: McDonough AP

	DGWC-69	B-62
3/31/2017	0.0022 (J)	
5/12/2017	0.0016 (J)	
6/16/2017	0.0009 (J)	
7/13/2017	0.0004 (J)	
10/26/2017	0.0031 (J)	
11/15/2017	0.0028 (J)	
3/2/2018	<0.005	
7/13/2018	<0.005	
11/8/2018	<0.005	
1/30/2019		<0.005
8/28/2019	<0.005	
9/11/2019		0.0003 (J)
10/16/2019	<0.005	
10/21/2019		0.00031 (J)
3/9/2020	<0.005	
8/13/2020	<0.005	<0.005
9/23/2020	<0.005	
9/24/2020		<0.005
3/10/2021	<0.005	
3/12/2021		<0.005
9/9/2021		<0.005
9/16/2021	<0.005	
Mean	0.003812	0.003659
Std. Dev.	0.001698	0.002291
Upper Lim.	0.005	0.005
Lower Lim.	0.0016	0.0003

Confidence Interval

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 12/16/2021 2:32 PM View: AP 1 Confidence Intervals

Plant McDonough Client: Southern Company Data: McDonough AP

	DGWC-37	DGWC-38	DGWC-39	DGWC-40	DGWC-67	DGWC-68A
9/2/2016				1.44		
9/8/2016	0.827 (U)	1.48	1.44			
12/7/2016	0.56 (U)	0.22 (U)	2.16			
12/8/2016				2.56		
3/30/2017	0.302 (U)	0.519 (U)	0.264 (U)	0.0844 (U)		
3/31/2017					0.404 (U)	
5/12/2017					0.206 (U)	1.18
6/16/2017					0.966 (U)	0.332 (U)
7/13/2017	0.731 (U)	1.11	0.517 (U)	0.963 (U)	0.387 (U)	0.304 (U)
8/8/2017						1.4
10/26/2017	1.04 (U)	1.13 (U)	0.875 (U)	0.748 (U)	0.619 (U)	0.477 (U)
3/1/2018	0.344 (U)	0.985 (U)	1.24			
3/2/2018				0.485 (U)	1.31	1.13
7/12/2018	0.566 (U)	0.615 (U)	0.935 (U)	0.231 (U)		
7/13/2018					0.667 (U)	0.407 (U)
11/8/2018	0.623 (U)	0.58 (U)	1.15 (U)	0.465 (U)	0.911 (U)	0.393 (U)
8/28/2019	1.24 (U)	0.517 (U)	1.15 (U)	0.592 (U)	0.751 (U)	1.77
10/16/2019						2.12
1/6/2020	2.01	0.527 (U)	1.4	1.6	0.965 (U)	
3/4/2020				1.62		
3/9/2020	0.499 (U)	1.04	1.36		0.819 (U)	1.33
8/13/2020	0.99	0.132 (U)	0.626 (U)	1.6	0.897 (U)	1.46
9/23/2020				1.28 (U)	0.131 (U)	0.563 (U)
9/24/2020	1.03 (U)	0.593 (U)				
9/25/2020			0.181 (U)			
3/8/2021				0.714 (U)		
3/10/2021						0.568 (U)
3/11/2021	0.956 (U)	0.0784 (U)	0.969 (U)		1.55	
9/14/2021				1.8		
9/15/2021		2.37				
9/16/2021	0.691 (U)				0.201 (U)	1.74
9/17/2021			0.911 (U)			
Mean	0.8273	0.7931	1.012	1.079	0.7189	1.012
Std. Dev.	0.4247	0.5907	0.5031	0.6893	0.4089	0.6109
Upper Lim.	1.115	1.193	1.353	1.546	0.996	1.426
Lower Lim.	0.5395	0.3928	0.6709	0.6118	0.4419	0.5976

Confidence Interval

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 12/16/2021 2:32 PM View: AP 1 Confidence Intervals

Plant McDonough Client: Southern Company Data: McDonough AP

	DGWC-69	B-62
3/31/2017	1.39	
5/12/2017	1.29	
6/16/2017	1.61	
7/13/2017	1.14	
10/26/2017	2.04	
11/15/2017	1.99	
3/2/2018	0.918 (U)	
7/13/2018	1.36 (U)	
11/8/2018	0.719 (U)	
1/30/2019		1.97 (U)
8/28/2019	1.38	
10/16/2019	0.826 (U)	
10/21/2019		1.82
3/9/2020	1.39	
8/13/2020	2.66	1.63
9/23/2020	1.8	
9/24/2020		1.28 (U)
3/10/2021	1.6	
3/12/2021		1.18 (U)
9/9/2021		1.7
9/16/2021	2.06	
Mean	1.511	1.597
Std. Dev.	0.5122	0.3082
Upper Lim.	1.844	2.02
Lower Lim.	1.178	1.173

Confidence Interval

Constituent: Fluoride, total (mg/L) Analysis Run 12/16/2021 2:32 PM View: AP 1 Confidence Intervals

Plant McDonough Client: Southern Company Data: McDonough AP

	DGWC-37	DGWC-38	DGWC-39	DGWC-40	DGWC-67	DGWC-68A
9/2/2016				0.5		
9/8/2016	0.08 (J)	0.1 (J)	0.17 (J)			
12/7/2016	0.21 (J)	0.27 (J)	0.33			
12/8/2016				0.35		
3/30/2017	0.05 (J)	0.12 (J)	0.17 (J)	0.21 (J)		
3/31/2017					0.02 (J)	
5/12/2017					<0.1	0.37
6/16/2017					0.03 (J)	0.12 (J)
7/13/2017	0.06 (J)	0.13 (J)	0.14 (J)	0.2 (J)	0.03 (J)	0.12 (J)
8/8/2017						0.11 (J)
10/26/2017	0.08 (J)	0.47	0.54	0.5	<0.1	0.11 (J)
3/1/2018	0.22	<0.1	0.13			
3/2/2018				0.33	<0.1	0.23
7/12/2018	0.32	0.23 (J)	0.13 (J)	0.57		
7/13/2018					0.25 (J)	0.099 (J)
11/8/2018	<0.1	<0.1	<0.3 (J)	<0.3 (J)	0.5	<0.3 (J)
3/13/2019	0.08 (J)	0.084 (J)	0.085 (J)	0.15 (J)	0.07 (J)	0.12 (J)
8/28/2019	0.074 (J)	0.066 (J)	0.086 (J)	0.14	<0.1	0.1
10/16/2019						0.093 (J)
10/17/2019					0.038 (J)	
10/18/2019	0.075 (J)	0.073 (J)	0.14 (J)	0.13 (J)		
3/4/2020				0.11 (J)		
3/9/2020	0.054 (J)	0.064 (J)	0.075 (J)		<0.1	0.082 (J)
8/13/2020	0.068 (J)	0.06 (J)	0.076 (J)	0.16	<0.1	0.076 (J)
9/23/2020				0.054 (J)	<0.1	0.07 (J)
9/24/2020	0.061 (J)	0.057 (J)				
9/25/2020			0.086 (J)			
3/8/2021				0.17		
3/10/2021						0.07 (J)
3/11/2021	0.057 (J)	0.058 (J)	0.083 (J)		<0.1	
9/14/2021				0.13		
9/15/2021		0.06 (J)				
9/16/2021	0.084 (J)				0.069 (J)	0.55
9/17/2021			0.13			
Mean	0.1014	0.1214	0.1576	0.2409	0.08794	0.1544
Std. Dev.	0.07777	0.1131	0.1194	0.1592	0.1217	0.1295
Upper Lim.	0.21	0.23	0.17	0.3219	0.07	0.23
Lower Lim.	0.054	0.057	0.083	0.1358	0.038	0.076

Confidence Interval

Constituent: Fluoride, total (mg/L) Analysis Run 12/16/2021 2:32 PM View: AP 1 Confidence Intervals
Plant McDonough Client: Southern Company Data: McDonough AP

	DGWC-69	B-62
3/31/2017	0.16 (J)	
5/12/2017	0.12 (J)	
6/16/2017	0.16 (J)	
7/13/2017	0.13 (J)	
10/26/2017	0.29 (J)	
11/15/2017	0.28 (J)	
3/2/2018	0.18	
7/13/2018	0.19 (J)	
11/8/2018	<0.3 (J)	
1/30/2019		0.43
3/13/2019	0.086 (J)	
8/28/2019	0.07 (J)	
10/16/2019	0.13 (J)	
10/21/2019		0.23 (J)
3/9/2020	0.068 (J)	
8/13/2020	0.084 (J)	0.11
9/23/2020	0.064 (J)	
9/24/2020		0.093 (J)
3/10/2021	0.055 (J)	
3/12/2021		0.11
9/9/2021		0.14
9/16/2021	0.11	
Mean	0.1369	0.1855
Std. Dev.	0.06963	0.1295
Upper Lim.	0.1805	0.3546
Lower Lim.	0.09325	0.06003

Confidence Interval

Constituent: Lead (mg/L) Analysis Run 12/16/2021 2:32 PM View: AP 1 Confidence Intervals
 Plant McDonough Client: Southern Company Data: McDonough AP

	DGWC-37	DGWC-38	DGWC-39	DGWC-40	DGWC-67	DGWC-68A
9/2/2016				<0.001		
9/8/2016	<0.001	<0.001	<0.001			
12/7/2016	<0.001	<0.001	<0.001			
12/8/2016				<0.001		
3/30/2017	0.0014 (J)	<0.001	<0.001	7E-05 (J)		
3/31/2017					<0.001	
5/12/2017					9E-05 (J)	<0.001
6/16/2017					<0.001	<0.001
7/13/2017	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
8/8/2017						<0.001
10/26/2017	<0.001	0.0001 (J)	<0.001	7E-05 (J)	<0.001	<0.001
3/1/2018	<0.001	<0.001	<0.001			
3/2/2018				<0.001	<0.001	<0.001
7/12/2018	<0.001	<0.001	<0.001	<0.001		
7/13/2018					<0.001	<0.001
11/8/2018	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
8/28/2019	6.1E-05 (J)	<0.001	8E-05 (J)	8.1E-05 (J)	<0.001	<0.001
10/16/2019						<0.001
10/17/2019					<0.001	
10/18/2019	<0.001	7.4E-05 (J)	<0.001	0.00015 (J)		
3/4/2020				0.00017 (J)		
3/9/2020	<0.001	6.1E-05 (J)	<0.001		4.7E-05 (J)	<0.001
8/13/2020	<0.001	<0.001	<0.001	4.9E-05 (J)	5.6E-05 (J)	<0.001
9/23/2020				0.00028 (J)	<0.001	0.00035 (J)
9/24/2020	<0.001	0.00014 (J)				
9/25/2020			0.00022 (J)			
3/8/2021				5.4E-05 (J)		
3/10/2021						6.7E-05 (J)
3/11/2021	<0.001	0.00014 (J)	<0.001		0.00025 (J)	
9/14/2021				<0.001		
9/15/2021		<0.001				
9/16/2021	<0.001				<0.001	<0.001
9/17/2021			<0.001			
Mean	0.0009641	0.000701	0.0008867	0.0005283	0.0007629	0.0008945
Std. Dev.	0.0002702	0.0004381	0.0003003	0.0004602	0.0004094	0.0002836
Upper Lim.	0.0014	0.001	0.001	0.001	0.001	0.001
Lower Lim.	6.1E-05	0.0001	0.00022	7E-05	9E-05	0.00035

Confidence Interval

Constituent: Lead (mg/L) Analysis Run 12/16/2021 2:32 PM View: AP 1 Confidence Intervals
Plant McDonough Client: Southern Company Data: McDonough AP

	DGWC-69	B-100
3/31/2017	<0.001	
5/12/2017	0.0001 (J)	
6/16/2017	<0.001	
7/13/2017	<0.001	
10/26/2017	<0.001	
11/15/2017	9E-05 (J)	
3/2/2018	<0.001	
7/13/2018	<0.001	
11/8/2018	<0.001	
8/28/2019	<0.001	
10/16/2019	<0.001	
3/9/2020	9E-05 (J)	
8/13/2020	5.9E-05 (J)	
8/17/2020		8.8E-05 (J)
9/23/2020	0.00017 (J)	
9/25/2020		0.00021 (J)
3/8/2021		0.00018 (J)
3/10/2021	0.0001 (J)	
9/13/2021		<0.001
9/16/2021	<0.001	
Mean	0.0006631	0.0003695
Std. Dev.	0.0004498	0.0004235
Upper Lim.	0.001	0.0003036
Lower Lim.	9E-05	5.528E-05

Confidence Interval

Constituent: Lithium (mg/L) Analysis Run 12/16/2021 2:32 PM View: AP 1 Confidence Intervals

Plant McDonough Client: Southern Company Data: McDonough AP

	DGWC-37	DGWC-38	DGWC-40	DGWC-67	DGWC-68A	DGWC-69
9/2/2016			0.0022 (J)			
9/8/2016	<0.03	0.0032 (J)				
12/7/2016	<0.03	0.0035 (J)				
12/8/2016			<0.03			
3/30/2017	0.0029 (J)	0.0035 (J)	0.0023 (J)			
3/31/2017				0.0052 (J)		0.0031 (J)
5/12/2017				0.0054 (J)	0.0016 (J)	0.003 (J)
6/16/2017				0.0048 (J)	<0.03	0.0031 (J)
7/13/2017	<0.03	0.0032 (J)	0.0023 (J)	0.0044 (J)	<0.03	0.0029 (J)
8/8/2017					<0.03	
10/26/2017	0.0018 (J)	0.0034 (J)	0.0021 (J)	0.0043 (J)	<0.03	0.0034 (J)
11/15/2017						0.0034 (J)
3/1/2018	0.0024 (J)	0.0033 (J)				
3/2/2018			0.0023 (J)	0.0047 (J)	<0.03	0.0028 (J)
7/12/2018	0.0028 (J)	0.0034 (J)	0.0022 (J)			
7/13/2018				0.0041 (J)	<0.03	0.0026 (J)
11/8/2018	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
8/28/2019	0.0025 (J)	0.0034 (J)	0.0022 (J)	0.0046 (J)	<0.03	0.0024 (J)
10/16/2019					<0.03	0.0032 (J)
10/17/2019				0.0047 (J)		
10/18/2019	0.0026 (J)	0.0032 (J)	0.0024 (J)			
3/4/2020			0.0027 (J)			
3/9/2020	0.0017 (J)	0.0033 (J)		0.0048 (J)	<0.03	0.0025 (J)
8/13/2020	0.0023 (J)	0.0028 (J)	0.0022 (J)	0.0044 (J)	<0.03	0.0031 (J)
9/23/2020			0.0022 (J)	0.0043 (J)	<0.03	0.0023 (J)
9/24/2020	0.0021 (J)	0.0029 (J)				
3/8/2021			0.0022 (J)			
3/10/2021					<0.03	0.0023 (J)
3/11/2021	0.0024 (J)	0.003 (J)		0.005 (J)		
9/14/2021			0.003 (J)			
9/15/2021		0.0029 (J)				
9/16/2021	0.0021 (J)			0.0044 (J)	0.00082 (J)	0.0023 (J)
Mean	0.009707	0.005	0.00602	0.00634	0.02616	0.004525
Std. Dev.	0.01267	0.00692	0.009739	0.006555	0.01013	0.006804
Upper Lim.	0.03	0.0035	0.003	0.0052	0.03	0.0032
Lower Lim.	0.0021	0.0029	0.0022	0.0043	0.0016	0.0024

Confidence Interval

Constituent: Lithium (mg/L) Analysis Run 12/16/2021 2:32 PM View: AP 1 Confidence Intervals
Plant McDonough Client: Southern Company Data: McDonough AP

	B-100	B-62
1/30/2019		<0.03
9/11/2019		0.0078 (J)
10/21/2019		0.0078 (J)
8/13/2020		0.0087 (J)
8/17/2020	0.0013 (J)	
9/24/2020		0.0084 (J)
9/25/2020	0.0027 (J)	
3/8/2021	0.0024 (J)	
3/12/2021		0.0087 (J)
9/9/2021		0.0094 (J)
9/13/2021	0.0022 (J)	
Mean	0.00215	0.01154
Std. Dev.	0.0006028	0.008158
Upper Lim.	0.003519	0.03
Lower Lim.	0.0007815	0.0078

Confidence Interval

Constituent: Mercury (mg/L) Analysis Run 12/16/2021 2:32 PM View: AP 1 Confidence Intervals

Plant McDonough Client: Southern Company Data: McDonough AP

	DGWC-37	DGWC-38	DGWC-39	DGWC-40	DGWC-67	DGWC-68A
9/2/2016				4.4E-05 (J)		
9/8/2016	<0.0002	<0.0002	<0.0002			
12/7/2016	<0.0002	<0.0002	<0.0002			
12/8/2016				<0.0002		
3/30/2017	6E-05 (J)	7E-05 (J)	5.9E-05 (J)	9E-05 (J)		
3/31/2017					<0.0002	
5/12/2017					<0.0002	<0.0002
6/16/2017					7E-05 (J)	7E-05 (J)
7/13/2017	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
8/8/2017						<0.0002
10/26/2017	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
3/1/2018	<0.0002	<0.0002	<0.0002			
3/2/2018				<0.0002	<0.0002	<0.0002
7/12/2018	4.4E-05 (J)	4E-05 (J)	<0.0002	4.5E-05 (J)		
7/13/2018					<0.0002	<0.0002
11/8/2018	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
8/28/2019	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
10/16/2019						<0.0002
10/17/2019					<0.0002	
10/18/2019	<0.0002	<0.0002	<0.0002	<0.0002		
3/4/2020				<0.0002		
3/9/2020	<0.0002	<0.0002	<0.0002		<0.0002	<0.0002
8/13/2020	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
9/23/2020				<0.0002	<0.0002	<0.0002
9/24/2020	9.1E-05 (J)	8.5E-05 (J)				
9/25/2020			<0.0002			
9/14/2021				<0.0002		
9/15/2021		<0.0002				
9/16/2021	<0.0002				<0.0002	<0.0002
9/17/2021			<0.0002			
Mean	0.0001711	0.0001711	0.0001899	0.0001699	0.0001907	0.0001907
Std. Dev.	5.824E-05	5.818E-05	3.768E-05	6.064E-05	3.474E-05	3.474E-05
Upper Lim.	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002
Lower Lim.	9.1E-05	8.5E-05	5.9E-05	9E-05	7E-05	7E-05

Confidence Interval

Constituent: Mercury (mg/L) Analysis Run 12/16/2021 2:32 PM View: AP 1 Confidence Intervals
Plant McDonough Client: Southern Company Data: McDonough AP

	DGWC-69
3/31/2017	<0.0002
5/12/2017	<0.0002
6/16/2017	7E-05 (J)
7/13/2017	<0.0002
10/26/2017	<0.0002
11/15/2017	<0.0002
3/2/2018	<0.0002
7/13/2018	<0.0002
11/8/2018	<0.0002
8/28/2019	<0.0002
10/16/2019	<0.0002
3/9/2020	<0.0002
8/13/2020	<0.0002
9/23/2020	<0.0002
9/16/2021	<0.0002
Mean	0.0001913
Std. Dev.	3.357E-05
Upper Lim.	0.0002
Lower Lim.	7E-05

Confidence Interval

Constituent: Molybdenum (mg/L) Analysis Run 12/16/2021 2:32 PM View: AP 1 Confidence Intervals

Plant McDonough Client: Southern Company Data: McDonough AP

	DGWC-38	DGWC-68A	DGWC-69
9/8/2016	<0.01		
12/7/2016	<0.01		
3/30/2017	0.0011 (J)		
3/31/2017			0.0124
5/12/2017		0.275	0.0117
6/16/2017		0.19	0.0087 (J)
7/13/2017	0.0012 (J)	0.211	0.0053 (J)
8/8/2017		0.207	
10/26/2017	0.0011 (J)	0.226	0.0244
11/15/2017			0.0237
3/1/2018	<0.01		
3/2/2018		0.215	0.0072 (J)
7/12/2018	<0.01		
7/13/2018		0.22	0.007 (J)
11/8/2018	<0.01	0.2	<0.01 (J)
8/28/2019	<0.01	0.21	0.0059 (J)
10/16/2019		0.22	0.01
10/18/2019	<0.01		
3/9/2020	0.001 (J)	0.19	0.0062 (J)
8/13/2020	0.00098 (J)	0.19	0.011
9/23/2020		0.2	0.0056 (J)
9/24/2020	0.001 (J)		
3/10/2021		0.2	0.0056 (J)
3/11/2021	0.00092 (J)		
9/15/2021	0.00099 (J)		
9/16/2021		0.18	0.009 (J)
Mean	0.005219	0.2089	0.01023
Std. Dev.	0.004629	0.02252	0.005862
Upper Lim.	0.01	0.2226	0.01236
Lower Lim.	0.00099	0.1942	0.006699

Confidence Interval

Constituent: Selenium (mg/L) Analysis Run 12/16/2021 2:32 PM View: AP 1 Confidence Intervals

Plant McDonough Client: Southern Company Data: McDonough AP

	DGWC-38	DGWC-40	DGWC-67	DGWC-68A	B-100
9/2/2016		0.0019 (J)			
9/8/2016	<0.005				
12/7/2016	<0.005				
12/8/2016		0.0022 (J)			
3/30/2017	<0.005	0.0023 (J)			
3/31/2017			<0.005		
5/12/2017			<0.005	<0.005	
6/16/2017			<0.005	<0.005	
7/13/2017	<0.005	0.0025 (J)	<0.005	<0.005	
8/8/2017				<0.005	
10/26/2017	<0.005	0.0036 (J)	<0.005	<0.005	
3/1/2018	<0.005				
3/2/2018		<0.005	<0.005	<0.005	
7/12/2018	<0.005	<0.005			
7/13/2018			<0.005	<0.005	
11/8/2018	<0.005	<0.01 (J)	<0.005	<0.005	
8/28/2019	<0.005	0.0017 (J)	<0.005	<0.005	
10/16/2019				<0.005	
10/17/2019			<0.005		
10/18/2019	<0.005	0.0027 (J)			
3/4/2020		0.0049 (J)			
3/9/2020	<0.005		<0.005	<0.005	
8/13/2020	<0.005	0.0018 (J)	<0.005	<0.005	
8/17/2020					<0.005
9/23/2020		0.0067 (J)	<0.005	<0.005	
9/24/2020	<0.005				
9/25/2020					<0.005
3/8/2021		0.0023 (J)			0.0019 (J)
3/10/2021				0.0017 (J)	
3/11/2021	0.0019 (J)		0.0027 (J)		
9/13/2021					<0.005
9/14/2021		0.0015 (J)			
9/15/2021	<0.005				
9/16/2021			<0.005	<0.005	
Mean	0.004793	0.003607	0.004847	0.00478	0.004225
Std. Dev.	0.0008004	0.002356	0.0005939	0.0008521	0.00155
Upper Lim.	0.005	0.003517	0.005	0.005	0.005
Lower Lim.	0.0019	0.001857	0.0027	0.0017	0.0019

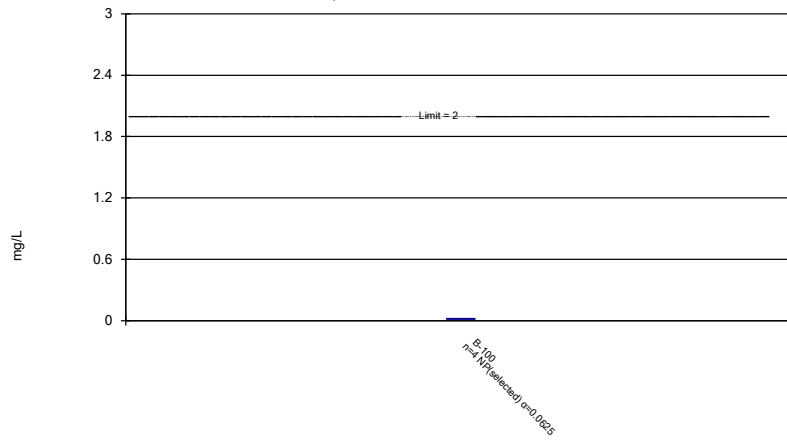
Confidence Interval

Constituent: Thallium (mg/L) Analysis Run 12/16/2021 2:32 PM View: AP 1 Confidence Intervals
 Plant McDonough Client: Southern Company Data: McDonough AP

	DGWC-38	DGWC-39	DGWC-40	DGWC-68A
9/2/2016			<0.001	
9/8/2016	<0.001	<0.001		
12/7/2016	<0.001	<0.001		
12/8/2016			<0.001	
3/30/2017	0.0001 (J)	0.0001 (J)	6E-05 (J)	
5/12/2017				<0.001
6/16/2017				<0.001
7/13/2017	0.0001 (J)	9E-05 (J)	6E-05 (J)	<0.001
8/8/2017				<0.001
10/26/2017	0.0001 (J)	0.0001 (J)	7E-05 (J)	<0.001
3/1/2018	<0.001	<0.001		
3/2/2018			<0.001	<0.001
7/12/2018	<0.001	<0.001	<0.001	
7/13/2018				0.00015 (J)
11/8/2018	<0.001	<0.001	<0.001	<0.001
8/28/2019	0.00014 (J)	6.9E-05 (J)	7E-05 (J)	<0.001
10/16/2019				<0.001
10/18/2019	0.0001 (J)	<0.001	<0.001	
3/4/2020			6.8E-05 (J)	
3/9/2020	0.00016 (J)	7.1E-05 (J)		<0.001
8/13/2020	0.00016 (J)	<0.001	<0.001	<0.001
9/23/2020			<0.001	<0.001
9/24/2020	0.00015 (J)			
9/25/2020		<0.001		
3/8/2021			<0.001	
3/10/2021				<0.001
3/11/2021	<0.001	<0.001		
9/14/2021			<0.001	
9/15/2021	<0.001			
9/16/2021				<0.001
9/17/2021		<0.001		
Mean	0.000534	0.0006953	0.0006885	0.0009433
Std. Dev.	0.0004517	0.0004461	0.0004559	0.0002195
Upper Lim.	0.001	0.001	0.001	0.001
Lower Lim.	0.0001	9E-05	6.8E-05	0.00015

Non-Parametric Confidence Interval

Compliance Limit is not exceeded.

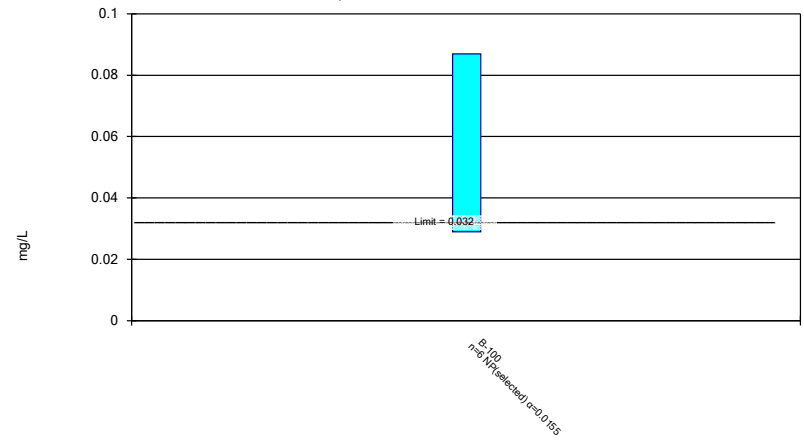


Normality testing disabled.

Constituent: Barium Analysis Run 12/16/2021 2:31 PM View: AP 1 Confidence Intervals Nonparametric
Plant McDonough Client: Southern Company Data: McDonough AP

Non-Parametric Confidence Interval

Compliance Limit is not exceeded.

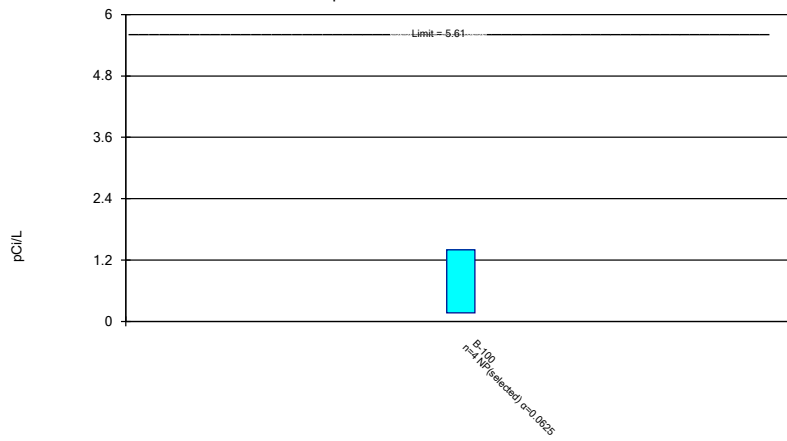


Normality testing disabled.

Constituent: Cobalt Analysis Run 12/16/2021 2:31 PM View: AP 1 Confidence Intervals Nonparametric
Plant McDonough Client: Southern Company Data: McDonough AP

Non-Parametric Confidence Interval

Compliance Limit is not exceeded.



Normality testing disabled.

Constituent: Combined Radium 226 + 228 Analysis Run 12/16/2021 2:31 PM View: AP 1 Confidence Inter
Plant McDonough Client: Southern Company Data: McDonough AP

Confidence Interval

Constituent: Barium (mg/L) Analysis Run 12/16/2021 2:32 PM View: AP 1 Confidence Intervals Nonparametric
Plant McDonough Client: Southern Company Data: McDonough AP

	B-100
8/17/2020	0.015
9/25/2020	0.022
3/8/2021	0.022
9/13/2021	0.021
Mean	0.02
Std. Dev.	0.003367
Upper Lim.	0.022
Lower Lim.	0.015

Confidence Interval

Constituent: Cobalt (mg/L) Analysis Run 12/16/2021 2:32 PM View: AP 1 Confidence Intervals Nonparametric
Plant McDonough Client: Southern Company Data: McDonough AP

	B-100
7/23/2020	0.086
8/3/2020	0.087
8/17/2020	0.077
9/25/2020	0.034
3/8/2021	0.029
9/13/2021	0.035
Mean	0.058
Std. Dev.	0.02804
Upper Lim.	0.087
Lower Lim.	0.029

Confidence Interval

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 12/16/2021 2:32 PM View: AP 1 Confidence Intervals Nonparametric
Plant McDonough Client: Southern Company Data: McDonough AP

	B-100
8/17/2020	1.4 (U)
9/25/2020	0.799 (U)
3/8/2021	0.168 (U)
9/13/2021	0.774 (U)
Mean	0.7853
Std. Dev.	0.5031
Upper Lim.	1.4
Lower Lim.	0.168

FIGURE K.

Appendix IV Trend Tests - Significant Results

Plant McDonough Client: Southern Company Data: McDonough AP Printed 11/8/2021, 11:00 AM

<u>Constituent</u>	<u>Well</u>	<u>Slope</u>	<u>Calc.</u>	<u>Critical</u>	<u>Sig.</u>	<u>N</u>	<u>%NDs</u>	<u>Normality</u>	<u>Xform</u>	<u>Alpha</u>	<u>Method</u>
Cobalt (mg/L)	DGWA-53 (bg)	-0.005485	-77	-53	Yes	15	0	n/a	n/a	0.01	NP
Cobalt (mg/L)	DGWC-40	0.002343	56	53	Yes	15	0	n/a	n/a	0.01	NP

Appendix IV Trend Tests - All Results

Plant McDonough Client: Southern Company Data: McDonough AP Printed 11/8/2021, 11:00 AM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Arsenic (mg/L)	DGWA-53 (bg)	0	11	53	No	15	66.67	n/a	n/a	0.01	NP
Arsenic (mg/L)	DGWA-70A (bg)	0	-4	-53	No	15	93.33	n/a	n/a	0.01	NP
Arsenic (mg/L)	DGWA-71 (bg)	0	9	48	No	14	85.71	n/a	n/a	0.01	NP
Arsenic (mg/L)	DGWC-69	0.00508	52	63	No	17	0	n/a	n/a	0.01	NP
Cobalt (mg/L)	DGWA-53 (bg)	-0.005485	-77	-53	Yes	15	0	n/a	n/a	0.01	NP
Cobalt (mg/L)	DGWA-70A (bg)	0	13	53	No	15	46.67	n/a	n/a	0.01	NP
Cobalt (mg/L)	DGWA-71 (bg)	0	35	48	No	14	64.29	n/a	n/a	0.01	NP
Cobalt (mg/L)	DGWC-40	0.002343	56	53	Yes	15	0	n/a	n/a	0.01	NP
Molybdenum (mg/L)	DGWA-53 (bg)	-0.002607	-25	-53	No	15	0	n/a	n/a	0.01	NP
Molybdenum (mg/L)	DGWA-70A (bg)	0	0	53	No	15	100	n/a	n/a	0.01	NP
Molybdenum (mg/L)	DGWA-71 (bg)	0	13	48	No	14	92.86	n/a	n/a	0.01	NP
Molybdenum (mg/L)	DGWC-68A	-0.006801	-42	-53	No	15	0	n/a	n/a	0.01	NP

APPENDIX E

Semi-Annual Remedy Selection and Design Progress Report



REPORT

Semi-Annual Remedy Selection and Design Progress Report

Plant McDonough-Atkinson Ash Pond 1

Submitted to:

Georgia Power Company

241 Ralph McGill Boulevard, Atlanta, Georgia 30308

Submitted by:

Golder Associates USA Inc.

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February 28, 2022

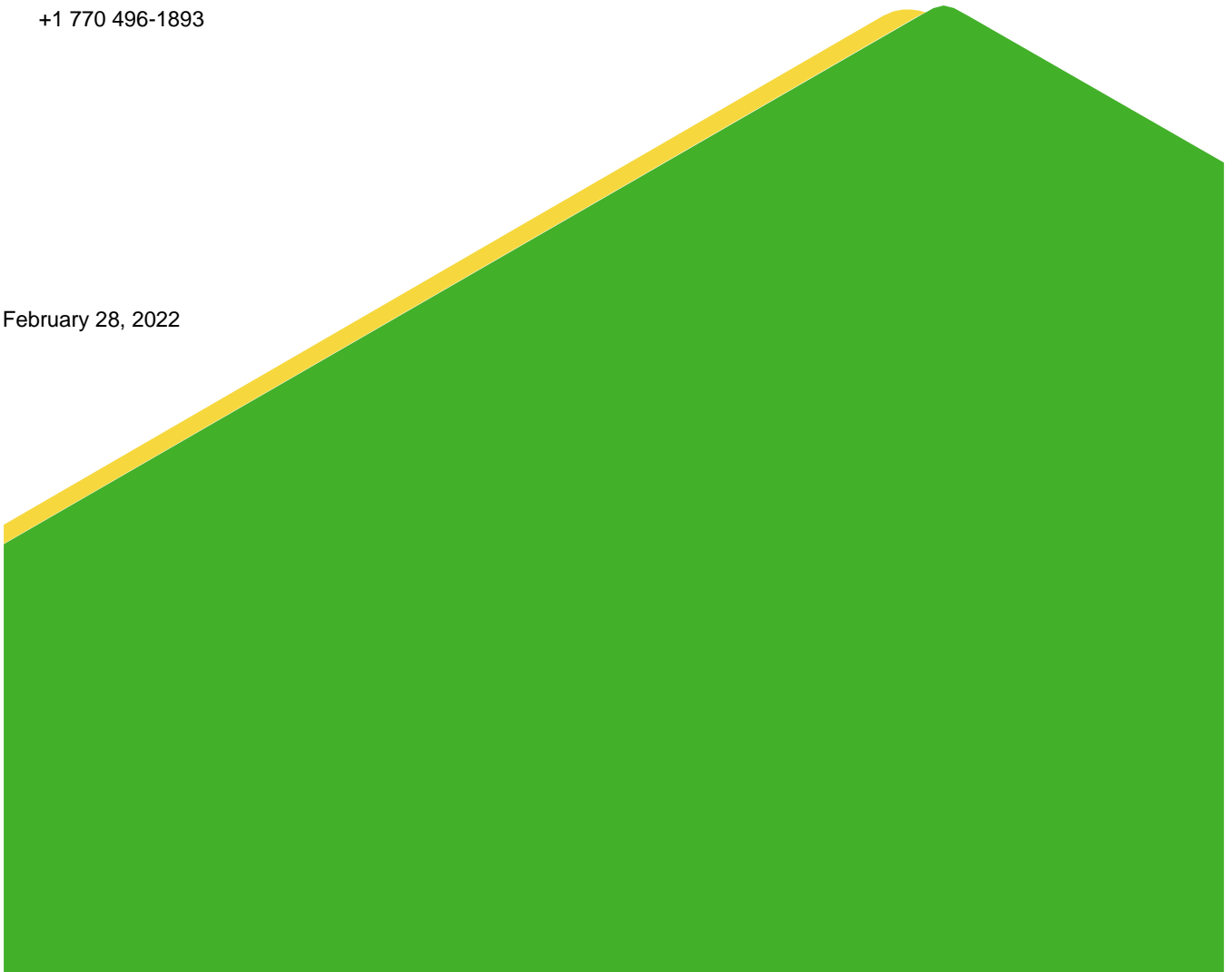


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Table 4:	Proposed ACM Supplementary Data Collection Tasks for January through June 2022

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Figure 1:	Site Location Map
Figure 2:	Monitoring Well, Piezometer and Surface Water Location Map
Figure 3:	Site Potentiometric Map – October 27, 2021
Figure 4:	Arsenic Isoconcentration Contour Map – September 2021
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Appendices

Appendix A:	Well Survey / EDR GeoCheck® Report
Appendix B:	Analytical Data Reports
Appendix C:	Sen's Slope/Mann Kendall Trend Analyses

Certification

This *Semi-Annual Remedy Selection and Design Progress Report, Georgia Power Company – Plant McDonough-Atkinson, Ash Pond 1 (AP-1)*, has been prepared in accordance with the United States Environmental Protection Agency coal combustion residual rule, specifically 40 Code of Federal (CFR) 227.97(a) and the Georgia Environmental Protection Division Rules for Solid Waste Management 341-3-4-.10(6)(a).

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1.0 INTRODUCTION

In accordance with the United States Environmental Protection Agency (US EPA) coal combustion residuals (CCR) rule [40 Code of Federal Regulations (CFR) 257 Subpart D]; published in 80 FR 21302-21501, April 17, 2015 (CCR Rule; USEPA, 2015a), Golder Associates USA Inc. (Golder) has prepared this *Semi-Annual Remedy Selection and Design Progress Report Plant McDonough-Atkinson Ash Pond 1 (February 2022; Semi-Annual Progress Report)* for the Georgia Power Company (Georgia Power) Plant McDonough-Atkinson Ash Pond 1 (AP-1 or Site). Specifically, this semi-annual progress report has been prepared pursuant to 40 CFR § 257.97(a) and the Georgia Environmental Protection Division (GA EPD) Rules for Solid Waste Management 391-3-4-.10(6)(a). This semi-annual report documents activities conducted in support of the previously submitted *Assessment of Corrective Measures Report – Plant McDonough-Atkinson Ash Pond 1* (ACM Report; Golder, 2020).

Plant McDonough, formerly a coal-fired power generating facility, was converted to a natural gas combined-cycle power generating facility in 2011. A Site location map is included as Figure 1.

Pursuant to § 257.96, Georgia Power initiated an ACM for AP-1 on July 9, 2020 to address the occurrence of cobalt and molybdenum in groundwater at statistically significant levels (SSLs). Subsequently, Georgia Power completed an ACM report on December 4, 2020 and posted it to the CCR compliance website in January 2021. Since submission of the ACM Report, arsenic was identified as an SSL on January 28, 2021 at well DGWC-69. The ACM has since been amended to include evaluation for arsenic in groundwater at DGWC-69.

As requested by GA EPD, an updated well survey of potential groundwater wells within a two-mile radius of Plant McDonough was conducted and consisted of reviewing federal, state, county records, and online sources. The findings from this survey are consistent to the previous well survey conducted in 2020 (NewFields, 2020). No new wells were identified during the 2021 survey. The survey is included in Appendix A.

In addition to the assessment monitoring program at the Site, Georgia Power conducted a human health and ecological risk evaluation to evaluate cobalt and molybdenum SSLs in groundwater at AP-1. The evaluation provides one of many lines of evidence that will be evaluated and factored into the remedy selection process, which will be completed in accordance with § 257.97. Based on this risk evaluation, concentrations of cobalt and molybdenum, detected in groundwater at AP-1 between August 2016 and March 2020 are not expected to pose a risk to human health or the environment (Wood, 2020). Cobalt and molybdenum data collected since March 2020 are consistent with data used in the risk evaluation; therefore, the conclusions of the *2020 Risk Evaluation Report* are supported by current conditions. The risk evaluation will be updated to include arsenic, and the results will be submitted with the final *Remedy Selection Report*.

1.1 Evaluation of Corrective Measures

Pursuant to § 257.97, Georgia Power is evaluating the potential corrective measures in the ACM report to identify a remedy or combination of remedies as soon as possible. The following corrective measures are potentially feasible for use at AP-1:

- Geochemical Approaches (In-Situ Injection)
- Hydraulic Containment (Pump and Treat)
- In-Situ Solidification/Stabilization (ISS)
- Monitored Natural Attenuation (MNA)

- Permeable Reactive Barrier (PRB)
- Phytoremediation
- Subsurface Vertical Barrier Wall (SVBW).

An evaluation of remedial technologies is presented in Table 1. As required by the CCR Rule, this Semi-Annual Progress Report describes the progress made in selecting and designing a remedy.

The following remedial alternatives have been retained for further evaluation.

- **Geochemical Approaches (In-Situ Injection):** Use of an injection well network, or other means of introducing reagents or air into the subsurface, is used to provide suitable reagents for either anaerobic or aerobic attenuation of constituents present as SSLs including, arsenic, cobalt, molybdenum. Under anaerobic conditions, arsenic would be attenuated within sparingly soluble sulfide minerals. Under aerobic conditions, soluble iron or manganese and oxygen (either via air sparging or through a chemical oxidant) would be injected to promote the formation of iron or manganese (oxy-) hydroxides for subsequent sorption of arsenic, cobalt, and to a lesser degree molybdenum onto these mineral phases. If sufficient iron is present in groundwater, the use of air sparging alone may be considered to precipitate iron (oxy-) hydroxides for sorption. In-situ chemical oxidation (ISCO) or in-situ chemical reduction (ISCR) can be used to chemically alter the redox environment in the subsurface to affect the mobility of certain inorganic compounds.
- **Hydraulic Containment (Pump and Treat):** Hydraulic containment involves extracting groundwater from wells or collection trenches to depress the water table and locally control the flow of groundwater. The proposed technology for a pump-and-treat system would include the installation of vertical and/or angled groundwater extraction wells downgradient of the source area(s). Groundwater extraction wells are feasible to install and can be designed and screened in the unconsolidated saprolite, transition zone, and fractured bedrock materials at the Site for effective hydraulic capture. Groundwater extraction wells installed in bedrock can alternatively be completed as open-hole borings to maximize groundwater removal from multiple water-bearing fracture zones at varying depths.
- **Monitored Natural Attenuation (MNA):** MNA relies on natural attenuation processes to achieve site-specific remediation objectives within a reasonable time frame relative to more active methods. Under certain conditions (e.g., through sorption, mineral precipitation or oxidation-reduction reactions), MNA effectively reduces the dissolved concentrations of inorganic constituents in groundwater.

The following remedial alternatives have been removed from consideration:

- **Subsurface Vertical Barrier Wall (SVBW):** As part of Site closure and source control, Georgia Power has elected to install a SVBW around AP-1 as an Advanced Engineering Method (AEM). Constructing a second SVBW outside the perimeter of the planned barrier wall is redundant and there is limited area for the construction of a second barrier.
- **Permeable Reactive Barrier (PRB):** Constructing a PRB wall outside of the alignment of the planned SVBW may impact the integrity of the SVBW. Additionally, there is limited space between the planned SVBW and either the property boundary or the adjacent surface water feature. As such, other retained options are more suitable for corrective action rather than the installation of a PRB at AP-1.

- **In-Situ Solidification Stabilization (ISS):** AP-1 is currently capped and in the process of being closed in place. The application of ISS is either redundant or incompatible with the current closure in-place plan.
- **Phytoremediation:** Minimal space is available downgradient of the impacted wells for tree plantings and the TreeWell® root system could impact the SVBW being installed for closure.

1.2 Adaptive Site Management

Georgia Power proactively initiated adaptive Site management as outlined in the ACM Report (Golder, 2020) to support the groundwater remedy selection process and address potential changes in Site conditions as appropriate during the ash pond closure. The adaptive Site management approach will take existing Site conditions, including natural attenuation mechanisms into account. Characterization activities to evaluate attenuation mechanisms at the Site may include collection of data necessary to progressively evaluate the existing and long-term effectiveness of these processes in the aquifer and reduce uncertainty for decision making at each screening step as listed in the US EPA guidelines for MNA (US EPA 2007, 2015b). In 2001, the US EPA issued MNA technical guidance specific to inorganic contaminants (US EPA, 2007) that contained four “tiers.” The 2015 MNA guidance retains these four “tiers,” but describes them as “phases” as described below (US EPA, 2015b). This 2015 MNA document for inorganic contaminants expands on and is designed to be a companion to the 1999 MNA guidance.

- **Phase I:** Demonstration that the groundwater plume is *not expanding*.
- **Phase II:** Determination that the *mechanism and rate* of the attenuation process are sufficient.
- **Phase III:** Determination that the *capacity* of the aquifer is sufficient to attenuate the mass of contaminant within the plume and the *stability* of the immobilized contaminant is sufficient to resist re-mobilization.
- **Phase IV:** Design of a *performance monitoring program* based on an understanding of the mechanism of the attenuation process, and establishment of contingency remedies tailored to site-specific characteristics.

Georgia Power will address Phase IV as appropriate during the development of the future corrective action monitoring plan, after the final remedy selection report.

2.0 AP-1 CLOSURE ACTIVITIES

AP-1 is currently capped and in the process of closure to minimize infiltration and erosion and to meet or exceed the requirements of § 257.102(d)(3)(ii). The Closure Plan (Golder, 2019) was prepared in accordance with § 257, Subpart D and meets the requirements of § 257.102(b). Maintenance will be provided on the final cover system for the required post-closure care period so that the integrity and effectiveness of the final cover system is maintained.

As part of Site closure and source control, Georgia Power has elected to install a SVBW around AP-1 as an AEM. The process of final design, permitting and subsequent installation of the vertical barrier wall is underway.

3.0 SUMMARY OF WORK COMPLETED

The following sections summarize field investigation activities and supplemental data collected since the previous *Semi-Annual Remedy Selection and Design Progress Report* (Golder, 2021a) to support Site characterization and

delineation of Appendix IV SSLs, as well as evaluation of the corrective measures presented in the ACM report. These data will be used to evaluate the feasibility, mechanisms, rates, and stability of identified remedial alternatives to address SSLs of arsenic, cobalt, and molybdenum in groundwater at AP-1. An evaluation of these data as they relate to remedy selection alternatives is ongoing and will be presented in future report(s). Analytical results evaluated during this reporting period are presented in Appendix B.

Groundwater Sampling

In September 2021, groundwater samples were collected from assessment monitoring wells and analyzed for Appendix III and Appendix IV constituents. Results of this sampling event are provided in the *2021 Semi-Annual Groundwater Monitoring and Corrective Action Report* (Golder, 2021b). Statistical analysis of the Appendix IV data will occur after four sampling events have been completed to construct the confidence intervals required to evaluate and confirm potential SSLs. Georgia Power will continue to monitor the assessment wells and adaptively manage the Site as new data become available.

Surface Water Sampling

Due to the proximity of the surface water body downgradient of AP-1, Georgia Power collected surface water samples from both the unnamed tributary and the Chattahoochee River downgradient of AP-1 on September 7, 2021. Results of these sampling events are presented in Appendix A of the *2021 Semi-Annual Groundwater Monitoring and Corrective Action Report* (Golder, 2021b).

Cobalt was not detected in the Chattahoochee River in the September 2021 sampling event. Additionally, to delineate the SSLs of arsenic and molybdenum at wells DGWC-68A and DGWC-69, the unnamed tributary near these well locations was sampled in September 2021. Arsenic and molybdenum have not been detected in the unnamed tributary. Georgia Power will continue to collect surface water samples on a semi-annual basis.

SSL Constituent Trend Analyses

Upgradient wells and wells with SSLs were further evaluated by Groundwater Stats Consulting (GSC) using the Sen's Slope/Mann Kendall trend test (Appendix C). The full report generated from the analyses is provided in Appendix C of the *2021 Annual Groundwater Monitoring and Corrective Action Report* (Golder, 2021b). Statistically significant trends were identified for the following well/constituent pairs:

1. Increasing trends: Cobalt at DGWC-40
2. Decreasing trends: Cobalt at DGWA-53.

The lack of increasing trends at many of the wells where SSLs have been identified confirms the chemical stability of the groundwater. Where SSLs have been identified, the "plume" appears to be stable

3.1 Nature and Extent Delineation

CCR compliance groundwater monitoring-related activities have been performed for AP-1 since September 2016 pursuant to the CCR rule. Georgia Power initiated an assessment monitoring program in November 2019 after identifying statistically significant increases (SSIs) of Appendix III parameters in groundwater. Pursuant to § 257.95, samples were collected from the compliance monitoring wells and analyzed for Appendix IV constituents.

The July through December 2021 assessment monitoring groundwater data show SSLs, as presented in the table below, at concentrations exceeding the state and/or federal Groundwater Protection Standards (GWPS). Details are provided in the *2021 Semi-Annual Groundwater Monitoring and Corrective Action Report* (Golder, 2021b).

AP-1 Statistically Significant Level Exceedances	
AP-1 Monitoring Well	Appendix IV Parameter
DGWC-40	Cobalt
DGWC-68A	Molybdenum
DGWC-69	Arsenic

The locations of the Site monitoring wells and piezometers are shown on Figure 2. Table 2 provides a summary of construction details for each of the Site monitoring wells and piezometers, respectively. A potentiometric surface contour map showing the October 2021 potentiometric surface elevations is provided on Figure 3.

Horizontal and Vertical Delineation

To characterize the nature and extent of arsenic, cobalt, and molybdenum SSLs, multiple piezometers have been installed and sampled at the Site (Golder, 2022); refer to the table below for constituent delineation status. In addition, surface water has been sampled at multiple locations to demonstrate horizontal delineation in surface water bodies where proximity to surface water prevented installation of additional wells. Figures 4 through 6 present isoconcentration contours for each of the constituents with an exceedance of the GWPS, including arsenic, cobalt, and molybdenum, respectively.

Constituent of Concern	Detection Monitoring Well with SSL	Vertical Delineation Well	Horizontal Delineation Well / Surface Water Monitoring Location
Arsenic	DGWC-69	B-112D ^[1]	UT02
Molybdenum	DGWC-68A	Ongoing	UT03
Cobalt	DGWC-40	B-105D ^[1]	B-62

Note:

[1] Delineation status is complete pending additional data collection. A minimum of four data points is needed to perform the required statistical analyses. To date, each of the samples collected at the indicated locations are below the GWPS.

Based on review of the analytical results, statistical analyses and the isoconcentration contours, horizontal delineation is complete. Vertical delineation is ongoing pending additional data collection and evaluation of natural sources of molybdenum. Data collected to date from both B-105D and B-112D are below the GWPS. Details regarding the specific well pairs used for delineation are described in detail in the *2021 Semi-Annual Groundwater Monitoring Report* (Golder, 2021b).

3.2 Supplemental Data Collection

Additional field investigation activities and data analyses have been performed to evaluate alternate sources and possible remedial alternatives. A summary of these data is included below.

Chemical Analysis

Chemical analysis of soils for Appendix IV metals showing SSLs and selected metals such as aluminum, iron, and manganese among others were completed as part of a source investigation to document the occurrence of these metals in the shallow subsurface that may be contributing to the groundwater quality at the Site. Soil samples were collected from test pits TP-8, TP-9, TP-11 and TP-12 located along the western perimeter of AP-1 (Figure 2) and were submitted to Pace Analytical Laboratories for analyses. Sample depths ranged from 6 to 8 feet below land surface in the unsaturated zone. Results of these analyses are presented in Table 3 and the lab reports are provided in Appendix B. Review of results indicates that arsenic is not detected at shallow soils and molybdenum concentrations range from non-detect [<0.32 milligrams per kilogram (mg/kg)] to 4.8 mg/kg.

Mineralogical Analysis

The mineralogical composition of soil and rock samples from select boreholes located west of AP-1 was assessed using quantitative X-Ray Diffraction (XRD) with Rietveld refinement. Cores from the screened interval at B-113D completed west of AP-1 near DGWC-68A were analyzed to determine the general mineralogy of bedrock. The purpose of the mineralogical analysis was to identify and quantify the crystalline mineral phases in each sample. Core samples were submitted to SGS Laboratories in Burnaby, Canada for analysis.

Results of these analyses are presented in Appendix B. Results indicate naturally occurring molybdenum is present in the rock in the form of molybdenite. Occurrence of molybdenite crystals in the biotite gneiss including more felsic layers indicates that molybdenum in groundwater in wells DGWC-68A, B-110D, and B-113D may be derived from the molybdenum-rich rocks. Analytical results and evaluation of these data as it relates to evaluation of remedy selection alternatives will be presented in a future report(s).

4.0 UPDATED SITE CONCEPTUAL MODEL

The additional data collected since the issuance of the ACM, together with new data evaluation tools and interpretations (described in the previous semi-annual remedy selection report), allow the development of a more refined conceptual Site model (CSM). The following summarizes the current understanding of the CSM within the context of selecting an appropriate groundwater corrective measure for AP-1.

- Data collected during this reporting period are consistent with the CSM as described in the Hydrogeologic Assessment Report (HAR, Golder, 2022).
 - Groundwater elevations recorded from Site monitoring wells have been used to further refine the Site potentiometric surface contour map. The October 2021 potentiometric surface shows groundwater flow is generally west towards the unnamed stream channel and south towards the Chattahoochee River, as shown on Figure 3.
 - Data from additional vertical delineation wells were used to refine the bedrock surface contour map. Minor modifications to the bedrock surface have been documented in the HAR (Golder, 2022).
- Delineation data collected have been evaluated and include:
 - Arsenic concentrations west of AP-1 (DGWC-69) are stable. Spatial delineation of arsenic is complete by downgradient sampling of surface water in the unnamed tributary (UT02) and by sampling of well B-112D. Delineation is preliminary pending collection of a minimum of 4 data points to complete the statistical analyses.

- Cobalt concentrations in groundwater appear to be related to relatively low pH in groundwater. Spatial delineation of cobalt is complete by onsite wells (B-62 and B-105D). Current vertical delineation status is pending additional data collection at B-105D.
- Molybdenum concentrations at DGWC-68A appear to be related to molybdenite found in the bedrock. Disruption of the formation during drilling (i.e., well installation) has mobilized the molybdenum. This is further supported by the decreasing trend, although not significant for molybdenum at DGWC-68A. Vertical delineation for molybdenum is ongoing pending documentation of the natural presence of molybdenum. Horizontal delineation is complete by downgradient sampling of surface water in the unnamed tributary (UT03), pending additional data collection.

5.0 CORRECTIVE MEASURES ALTERNATIVES

Based on the data collected to date, three of the seven potential corrective measures being evaluated for AP-1 are retained for further evaluation. Table 1 presents a summary of each of the remedial alternatives presented as part of the ACM. Table 4 provides a summary of additional data planned to be collected to further evaluate the feasibility of the remaining alternatives. The retention evaluation (Retained for Further Evaluation or Not Retained) for each potential remedial alternative is included on Table 1. The following three remedial alternatives have been retained for further consideration:

- Geochemical Approaches (In-Situ Injection)
- Hydraulic Containment (Pump and Treat)
- Monitored Natural Attenuation (MNA)

6.0 PLANNED ACTIVITIES

Georgia Power has initiated activities as outlined in the ACM Report (Golder, 2020) to support the groundwater remedy selection process and address potential changes in Site conditions as appropriate. The adaptive Site management approach toward remedy selection may be adjusted over the Site's life cycle as new Site information and technologies become available. To this end, Georgia Power will continue data collection efforts as necessary in support of efforts to refine the CSM and to further evaluate the feasibility of each corrective measure identified in the ACM Report.

Supplementary data collection and evaluation activities proposed to be completed within the next 6 months are presented on Table 4, with the key elements summarized below.

- Continue to evaluate natural sources of molybdenum at B-113D.
- Collect additional groundwater quality data to complete statistical analyses of delineation data. In addition to Appendix III/IV constituents, samples may also be analyzed for major cations/anions and other parameters for characterization of groundwater and to evaluate plume stability as well as potential remedies.
- Groundwater samples will be collected from select wells at AP-1 for jar/column testing. Jar/Column testing is planned to provide insight into how flow rates and residence times (pore volumes) and amendment dosage may impact the outcome for in-situ injections. Injection scenarios will be further refined as results are evaluated.

- Geochemical modeling and evaluation will be performed to evaluate the cause of the cobalt exceedance at well DGWC-40 and the likelihood that it is due to consistently low pH in that area (<5.0), while near to and surrounding AP-1 have a higher pH (5.5 to 7.0).
- Groundwater flow modeling will be performed to evaluate various potential treatments including potential in-situ treatment and hydraulic containment.
- Evaluate potential radius of influence for geochemical injections and determine the conceptual layout to achieve injection radius in target areas.

Georgia Power will continue to prepare semi-annual progress reports to document AP-1 groundwater conditions, results associated with additional data collection, and the progress in selecting and designing a groundwater remedy in accordance with § 257.97(a). Georgia Power will include these future semi-annual progress reports with routine groundwater monitoring and corrective action reports to meet the requirements of § 257.105(h)(12), § 257.106(h)(9), and § 257.107(h)(9), respectively.

7.0 REFERENCES

Golder, 2019. *Amended Written Closure Plan 40 CFR 257.102, Plant McDonough Ash Pond 1*, April 2019.

Golder, 2020. *Assessment of Corrective Measures Report – Plant McDonough-Atkinson Ash Pond 1*, Golder Associates Inc., December 4, 2020.

Golder, 2021a. *Semi-Annual Remedy Selection and Design Progress Report, Plant McDonough-Atkinson, Ash Pond 1*, Golder Associates, Inc., July 2021.

Golder, 2021b. *Semi-Annual Groundwater Monitoring and Corrective Action Report, Plant McDonough-Atkinson, Ash Pond 1*, Golder Associates, Inc., February 2022.

Golder, 2022, *Hydrogeologic Assessment Report, Plant McDonough-Atkinson Ash Pond 1, Ash Pond 2 and Ash Pond 3/4*, Golder Associates Inc., February 2022.

Newfields, 2020. *Well Survey Plant McDonough Ash Pond 1, Ash Pond 2 and Ash Ponds 3/4 Cobb County, GA*, NewFields, March 5, 2020.

US EPA 2007. *Monitored Natural Attenuation for Inorganic Contaminants in Ground Water. Volume 1 – Technical Basis for Assessment*. National Risk Management Laboratory. EPA/600/R-07/139. October 2007.

US EPA. 2015a. Federal Register. Volume 80. No. 74. Friday April 17, 2015. Part II. Environmental Protection Agency. 40 CFR Parts 257 and 261. Hazardous and Solid Waste Management System; Disposal of Coal Combustion Residuals from Electric Utilities; Final Rule. [EPA-HQ-RCRA-2009-0640; FRL-9919-44-OSWER]. RIN-2050-AE81, April 2015.

US EPA, 2015b. *Use of Monitored Natural Attenuation for Inorganic Contaminants in Groundwater at Superfund Sites*. U.S. Environmental Protection Agency Office of Solid Waste and Emergency Response Directive, August 2015.

Wood, 2020. Risk Evaluation Report Plant McDonough Ash Pond 1, Wood Environment & Infrastructure Solutions, Inc., December 2020.

TABLES

TABLE 1
Evaluation of Remedial Technologies
 Georgia Power – Plant McDonough-Atkinson AP-1
 Atlanta, Georgia

Corrective Measure	REGULATORY CITATION FOR CRITERIA: 40 CFR 257.96(C)(1)		
	Description	Performance	Reliability
Geochemical Approaches (in situ injection)	Use of an injection well network, or other means of introducing reagents or air into the subsurface, to provide suitable reagents for either anaerobic or aerobic attenuation of arsenic (As) and cobalt (Co). Under anaerobic conditions, As and Co would be attenuated within sparingly soluble sulfide minerals; this approach might also increase the attenuation of molybdenum (Mo), particularly if combined with an organic amendment. Under aerobic conditions, soluble iron or manganese and oxygen (either via air sparging or through a chemical oxidant) would be injected to promote the formation of iron or manganese (oxy-) hydroxides for subsequent sorption of As and Co (and potentially, Mo) onto these mineral phases. If sufficient iron is present in groundwater, the use of air sparging alone may be considered to precipitate iron (oxy-) hydroxides for sorption. In-situ chemical oxidation (ISCO) or in-situ chemical reduction (ISCR) can be used to chemically alter the redox environment in the subsurface to affect the mobility of certain inorganic compounds, including As and Co.	The effective immobilization of As and Co has been shown under aerobic and anaerobic conditions; however, the anaerobic approach (involving the injection of an electron donor together with iron or manganese and sulfur) requires careful study and testing. While aerobic approaches are somewhat less complex, additional aquifer characterization is needed to further evaluate these options. It is currently not well understood whether molybdenum can be efficiently attenuated using in-situ redox manipulations due to slow reaction kinetics. Mo attenuation under both aerobic and anaerobic conditions needs to be further evaluated but is expected to occur. Mo has been effectively immobilized under biologically enhanced conditions. Mo is more strongly sorbed to aluminum oxides than other metal oxides, and it is generally less sorptive and more mobile compared to As and Co.	Reliability dependent on permeability of the subsurface and the amount and distribution of secondary iron or manganese (oxy-) hydroxides (for aerobic approach), or electron donors and soluble iron or manganese and sulfur that can be consistently distributed (for anaerobic approach). Reliable technology if injected materials can be distributed throughout the impacted aquifer. Bench- and/or pilot-scale treatability testing programs are needed to understand the biogeochemical processes that would effectively reduce migration of As, Co and Mo in groundwater.
Hydraulic Containment (pump- and-treat)	Hydraulic containment refers to the use of groundwater extraction to induce a hydraulic gradient for hydraulic capture or control the migration of impacted groundwater. This approach uses extraction wells or trenches to capture groundwater, which may subsequently require above-ground treatment and permitted discharge to a receiving water feature, reinjection into the groundwater, or reuse (e.g., land application, CCR conditioning, etc.). It is applicable to a variable mix of inorganic constituents, including dissolved As, Co and Mo.	Pump and treat (P&T) is effective at providing hydraulic control, but it is unclear whether full groundwater remediation can be achieved without further understanding attenuation mechanisms at the Site. At AP-1, implementation of the corrective measure is contingent on completing additional assessment activities (i.e., high-resolution site characterization, additional pump tests, flow modeling, and capture zone analysis). This is needed to refine the constituent distribution in the subsurface to target specific zones for pumping for improved mass recovery efficiency/ effectiveness and to further evaluate the potential remedy performance.	Generally reliable for hydraulic containment, but uncertainty exists whether groundwater remediation goals can be achieved within a reasonable time frame without further understanding attenuation mechanisms.

TABLE 1
Evaluation of Remedial Technologies
 Georgia Power – Plant McDonough-Atkinson AP-1
 Atlanta, Georgia

Corrective Measure	REGULATORY CITATION FOR CRITERIA: 40 CFR 257.96(C)(1)		
	Description	Performance	Reliability
In-Situ Solidification / Stabilization	In-situ stabilization is a technique that uses mixing of the CCR with additives to solidify the material in place and reduce future dissolution of CCR compounds from the stabilized material. Additives typically include Portland cement, and the solidification is completed in-situ using large diameter augers. CCR located beneath the water table would be isolated by ISS.	Medium to high, groundwater impacts would be addressed through the processes of natural attenuation. This alternative would isolate/secure the source in a bound matrix, and over time, allow the concentrations of constituents of concern (COCs) in downgradient groundwater to decline to below applicable standards.	In-situ stabilization can be a reliable corrective measure for As, Co, and Mo in groundwater. Reliability is dependent on the permeability of the subsurface and mechanics of injection.
Monitored Natural Attenuation (MNA)	MNA relies on natural attenuation processes to achieve site-specific remediation objectives within a reasonable time frame relative to more active methods. Under certain conditions (e.g., through sorption, mineral precipitation or oxidation-reduction reactions), MNA effectively reduces the dissolved concentrations of inorganic constituents in groundwater. Attenuation mechanisms for inorganic constituents at CCR sites, including As, Co and Mo at AP-1, are either physical (e.g., dilution, dispersion, flushing, and related processes) or chemical (sorption or oxidation reduction reactions). Chemical attenuation processes include precipitation, and sorption reactions such as adsorption on the surfaces of soil minerals, absorption into the matrix of soil minerals, or partitioning into organic matter. Further, oxidation-reduction (redox) reactions, via abiotic or biotic processes, can transform the valence states of some inorganic constituents to less soluble and thus less mobile forms. For As, Co and Mo, the main attenuation processes include sorption to iron and manganese oxides (As, Co and Mo), and formation of sparingly soluble sulfide minerals (As and Co).	Physical and chemical MNA mechanisms for As, Co and Mo, including dilution, dispersion, sorption, and oxidation reduction reactions can be effective at achieving groundwater protection standards (GWPS) within a reasonable time frame. Attenuation processes for As, Co and Mo are already occurring at the site as evidenced by groundwater data from the delineation wells. Source control will improve the mass balance such that the buffer capacity of the aquifer is unlikely to be exhausted, and the attenuation processes already at work for As, Co and Mo at AP-1 will further enhance ongoing MNA.	Reliable as long as sufficient attenuation capacity is present. MNA is reliable and can either be used as a stand-alone corrective measure for groundwater impacted by dissolved As, Co and/or Mo, or in combination with a second technology.
Permeable Reactive Barrier (PRB)	Permeable reactive barrier (PRB) technology typically involves the installation of a permeable subsurface wall constructed with reactive media for the removal of constituents as groundwater passes through. Either ZVI-Carbon matrix or solid carbon (bio-barrier) are likely viable for the concurrent removal of As, Co and Mo. The carbon could be composed of peat moss, mulch or another carbon source. Exact placement of the PRB would be contingent on finalization of the nature and extent characterization. PRB walls are typically keyed into the bedrock. While the shallow groundwater in the residuum and fractured bedrock is connected to the groundwater in more competent bedrock, the higher permeability/conductivity of the PRB is not expected to impede groundwater flow. PRBs can also be constructed as “funnel and gate” systems, where a barrier wall directs groundwater to a smaller “treatment gate” filled with reactive media.	PRBs have been shown to effectively address As, Co in groundwater, but additional testing is required for Mo to select the appropriate reactive media. The approach is expected to achieve GWPS for both constituents as impacted groundwater passes through the reactive barrier. Mo redox kinetics may be slow and hence a thicker wall might be needed relative to solely treating for As and Co. Furthermore, additional testing is required to select the appropriate sorptive media mix, especially related to Mo.	Reliable groundwater corrective measure technology, but loss of reactivity over time may require re-installation depending on the duration of the remedy. Additional data collection, including conducting a bench and/or pilot study, is needed to better characterize current attenuation mechanisms and/or select the appropriate reactive media mix for a PRB wall.

TABLE 1
Evaluation of Remedial Technologies
 Georgia Power – Plant McDonough-Atkinson AP-1
 Atlanta, Georgia

Corrective Measure	REGULATORY CITATION FOR CRITERIA: 40 CFR 257.96(C)(1)		
	Description	Performance	Reliability
Phyto Remediation (TreeWell®)	Phytoremediation uses trees and other plants to degrade or immobilize constituents or achieve hydraulic control without the need for an above-ground water treatment system and infrastructure. Within the context of AP-1, this corrective measure would likely use an engineered (proprietary) TreeWell® phytoremediation system along the point of compliance or downgradient edge of the impacted groundwater for hydraulic control. The system promotes root development to the targeted groundwater zone (depth), allowing for hydraulic control of impacted groundwater. In addition, immobilization of As, Co and Mo within the root zone as well as incidental uptake of dissolved As, Co and Mo with groundwater is expected to occur concurrent with hydraulic control.	Once established (typically at the end of the third growing season), a TreeWell® system is effective for providing hydraulic containment of groundwater, and potential reduction of As, Co and Mo concentrations through immobilization and/or uptake and sequestration in the tree biomass; however, the main purpose is to provide hydraulic control. Given the likely construction of a SVBW for groundwater control at AP-1, phytoremediation is not practicable. Further the potential impacts to the planned SVBW from root development makes this option infeasible.	Engineered phytoremediation is a proven technology where hydrogeologic factors are taken into account (e.g., hydraulic conductivity, flow velocity, depth to impacted groundwater zone, etc.). This is considered an active remedial approach through the use of trees as the "pumps" driving the system. Careful design will be needed to select the proper species, which will include consideration of groundwater chemistry, plant uptake of constituents, and groundwater flow modeling to evaluate the required number and placement of TreeWell® units.
Subsurface Vertical Barrier Walls	This approach involves placing a barrier to groundwater flow in the subsurface, frequently around a source area, to prevent future migration of dissolved constituents in groundwater from beneath the source to downgradient areas. In general, barrier walls are designed to provide containment; localized treatment achieved through the sorption or chemical precipitation reactions from construction of the walls are incidental to the design objective. Barrier walls can also be used in downgradient applications to limit discharge to a surface water feature or to reduce aquifer recharge from an adjacent surface water feature when groundwater extraction wells are placed near one. A variety of barrier materials can be used, including cement and/or bentonite slurries, geomembrane composite materials, or driven materials such as steel or vinyl sheet pile.	Barrier walls are a proven technology for groundwater cutoff at impoundments. Slurry walls are limited by the depth of installation, which is approximately 90 ft below ground surface. However, site-specific geologic and technology-specific considerations may limit this depth to shallower installations. Within the context of AP-1, a barrier wall might be used in conjunction with a "funnel and gate" system for a PRB rather than a stand-alone technology. As such, groundwater with As, Co and Mo above GWPS could either be directed to "treatment gates" for passive treatment (in a PRB) or migration of impacted groundwater could be minimized via barrier wall installation. Additional subsurface investigations, aquifer testing, and compatibility testing with site-specific groundwater will be needed.	Generally reliable as a barrier to groundwater flow; however, treatment of downgradient groundwater is incidental and not the primary objective.

TABLE 1
Evaluation of Remedial Technologies
 Georgia Power – Plant McDonough-Atkinson AP-1
 Atlanta, Georgia

Corrective Measure	REGULATORY CITATION FOR CRITERIA: 40 CFR 257.96(C)(1)		
	Ease of Implementation	Potential Impacts	Time Requirement to Begin/Complete
Geochemical Approaches (in situ injection)	Moderate. Installation of injection well network or other injection infrastructure would be required. Alternative installation approaches may be considered, such as along the downgradient edge of impacted groundwater, which would function similar to a PRB application. Potential for clogging of aquifer matrix and/or injection well infrastructure. Chemical distribution during injections (i.e., radius of influence) needs to be evaluated.	Minimal impacts are expected if remedy works as designed, based on a thorough pre-design investigation, geochemical modeling, and bench/pilot study results. Redox-altering processes have the potential to mobilize naturally-occurring constituents as an unintended consequence if not properly studied and implemented.	Installation of the injection network can be accomplished relatively quickly (1 to 2 months). However, a thorough pre-design investigation, geochemical modeling, and/or bench- and/or pilot-testing will be required to obtain design parameters prior to design and construction of the corrective measure, which may take up to 24 months. Once installed, the time required to achieve GWPS within the treatment area may be relatively quick but depends on the attenuation process kinetics of each targeted constituent. The time for complete distribution of the injected materials throughout the treatment area is also variable.
Hydraulic Containment (pump- and-treat)	Moderate. Proven approach, and supplemental installation of extraction wells/trenches is fairly straightforward. The extracted groundwater may potentially require an above-ground treatment system. A variety of sorption and precipitation approaches exist for ex-situ treatment of Co and Mo. Operation and maintenance (O&M) requirements are expected to include upkeep of infrastructure components (pumps, pipes, tanks, instrumentation and controls, above-ground treatment system) and handling of treatment residuals.	Moderate. The main potential impacts are related to the presence and operation of an on-site above-ground water treatment facility and related infrastructure to convey and treat extracted groundwater. Pumping activity may unintentionally alter the geochemistry within the hydraulic capture zone.	Installation of extraction wells and/or trenches can be accomplished relatively quickly (1 to 2 months). However, additional aquifer testing, system design and installation, and permit approval may be required, which may take up to 24 months. The initiation of the approach would be contingent on the start-up of the wastewater treatment infrastructure. Hydraulic containment can be achieved relatively quickly after startup of the extraction system, but uncertainty exists with respect to the time to achieve GWPS without additional data collection to better understand attenuation mechanisms for As, Co and Mo.
In-Situ Solidification / Stabilization	Easy to moderate, implementation of ISS will require a detailed design effort with bench scale testing to determine the appropriate amendment mix for a variety of overburden geologic materials. Pilot testing will also be needed to verify the ability of equipment to solidify material at depth. ISS has not been commonly used to stabilize entire ash units as part of a closure strategy.	Potential impacts of the remedy will be negligible.	In-situ stabilization of AP-1 is predicted to take a number of years to complete, depending on the availability of specialized contractors and equipment.
Monitored Natural Attenuation (MNA)	Reasonably implementable with respect to infrastructure, but moderate to complex with respect to documentation. Proven approach, but additional data are needed to show that the existing attenuation capacity is sufficient to meet site objectives within a reasonable timeframe. A monitoring well network already exists to implement future groundwater monitoring efforts.	None. MNA relies on the natural processes active in the aquifer matrix to reduce constituent concentrations without disturbing the surface or the subsurface.	The infrastructure to initiate MNA is already in place. Demonstrating attenuation mechanisms and capacity can be time-consuming and can take up to 24 months. MNA is expected to be successful within a reasonable time frame following pond closure. Engineering measures will be implemented during closure of the CCR unit to minimize potential impacts to the subsurface during closure activities and routine groundwater monitoring will be used to verify that groundwater impacts remain stable or decrease over time.

TABLE 1
Evaluation of Remedial Technologies
 Georgia Power – Plant McDonough-Atkinson AP-1
 Atlanta, Georgia

Corrective Measure	REGULATORY CITATION FOR CRITERIA: 40 CFR 257.96(C)(1)		
	Ease of Implementation	Potential Impacts	Time Requirement to Begin/Complete
Permeable Reactive Barrier (PRB)	Moderate to difficult. Trenching would be required to install a mix of reactive materials in the subsurface. Continuous trenching may be the most feasible construction method. Installation methods and materials are readily available. Once installed, treatment will be passive and O&M requirements are minimal if replacement of the PRB is not necessary.	Minimal impacts are expected following the construction of the remedy. However, ZVI has the potential to create anaerobic conditions downgradient of the PRB wall that may mobilize redox-sensitive naturally-occurring constituents. These conditions need to be carefully monitored. Short-term impacts during the construction of the remedy can be mitigated through appropriate planning and health and safety measures.	Installation of a PRB can be accomplished relatively quickly (6 to 12 months), depending on the final location and configuration. However, bench- and/or pilot-testing would be required to obtain design parameters prior to design and construction of the remedy, which may take up to 24 months. Once installed, the time to achieve GWPS downgradient of the PRB is anticipated to be relatively quick.
Phyto Remediation (TreeWell®)	Reasonably implementable to moderate. Engineered approach has been proven effective, and specific depth zones can be targeted. Trees are installed as "tree wells" in a large diameter boring to get the roots deep enough to intercept impacted groundwater flow paths. Area must be clear of above and below-ground structures (i.e., power lines). The system, once established (approximately three growing seasons), is a self-maintaining, sustainable remedial system that has no external energy requirements and little maintenance (i.e., efforts normally associated with landscaping).	Minimal impacts are expected. In fact, there are several positive impacts expected, including enhanced aesthetics, wildlife habitat, and limited energy consumption.	The design phase will require some groundwater modeling for optimal placement of the TreeWell® units, which may take up to 6 months. Depending on the number of required units, the installation effort is expected to last several weeks. Hydraulic capture/control is expected approximately three years after planting and system performance is expected to further improve over time.
Subsurface Vertical Barrier Walls	Moderate to difficult. Trenching will be required to fill in the various slurry mixes; alternatively, sheet pile installations can be accomplished without excavation of trenches. The application of barrier walls is limited by the depth of installation, which similar to PRBs, should be keyed into a low permeability layer such as a thick clay layer, PWR, or bedrock. Installation methods and materials are readily available.	Minimal impacts are expected following the construction of the remedy. Short-term impacts during the construction of the remedy can be mitigated through appropriate planning and health and safety measures. Changes to groundwater flow patterns due to installation of the barrier wall are expected, which can affect other aspects of groundwater corrective action.	Installation of a barrier wall can be accomplished relatively quickly (6 to 12 months), depending on the final location and configuration. However, some design phase and additional aquifer and compatibility testing will be required, which may take up to 24 months. Once installed, preventing migration of constituents dissolved in groundwater is anticipated to be relatively quick. Since this approach does not treat the downgradient area of impacted groundwater but prevents migration from a source area, it will likely have to be maintained long-term and coupled with other approaches.

TABLE 1
Evaluation of Remedial Technologies
 Georgia Power – Plant McDonough-Atkinson AP-1
 Atlanta, Georgia

Corrective Measure	REGULATORY CITATION FOR CRITERIA: 40 CFR 257.96(C)(1)			Retention Evaluation
	Institutional Requirements	Other Env. Or Public Health Requirements	Relative Costs	
Geochemical Approaches (in situ injection)	Deed restrictions may be necessary until in-situ treatment has achieved GWPS. A new UIC permit (for in-situ injections) would be required to implement this corrective measure. No other institutional requirements are expected at this time.	None expected at this point. Potential for mobilization of redox-sensitive constituents exists during implementation of an anerobic attenuation approach. Following installation, the remedy is passive.	Medium (depending on expanse of injection network required and injectate volume required per derived design parameters)	Retained for further analysis; can be applied to As, and Co as a sparingly-soluble mineral, or could be applied to raise the groundwater pH to promote immobilization through sorption mechanisms. Additional evaluation required to determine likelihood to treat Mo.
Hydraulic Containment (pump- and-treat)	Depending on the effluent management strategy, modifications to the existing NPDES permit may be required, or obtaining a new underground injection control (UIC) permit may be needed if groundwater reinjection is chosen. In addition, deed restrictions may be required as long as groundwater conditions are above regulatory standards for unrestricted use.	Above-ground treatment components may need to be present for an extended period of time, generating residuals requiring management and disposal.	Medium to high (depending on remedy duration, complexity of above-ground treatment system, and volume of water processed)	Retained for further analysis; extracted water could be routed to wastewater treatment infrastructure built for dewatering and closure of ponds at the site. Could be considered an effective measure to maintain hydraulic control along the engineered stream channel west of AP-1 or the Chattahoochee River south of AP-1.
In-Situ Solidification / Stabilization	Deed restrictions may be necessary until groundwater concentrations are below GWPS. No other institutional requirements that may limit application of this technology are expected at this time.	Changes to groundwater chemistry relative to the mobility of Appendix IV constituents following completion of ISS, where large volumes of amendments (typically Portland cement) are added to the subsurface, are unknown and would require pilot testing.	Medium, depending on permeability of aquifer	Not retained for further analysis; the application of ISS is either redundant or incompatible with the current closure in-place plan. Not retained for further analysis.
Monitored Natural Attenuation (MNA)	MNA may require the implementation of institutional controls, such as deed restrictions, to preclude potential exposure to groundwater within the footprint of impacted groundwater until GWPS are achieved.	Little to no physical disruption to remediation areas and no adverse construction-related impacts are expected on the surrounding community.	Low to medium	Retained for further analysis; may be used as a stand-alone corrective measure or in conjunction with other potential groundwater corrective measures.
Permeable Reactive Barrier (PRB)	Deed restrictions may be necessary for groundwater areas upgradient of the PRB (if not installed along the waste boundary). No other institutional requirements are expected at this time.	None expected at this point. Following installation, the remedy is passive. However, certain treatment media (such as ZVI) have the potential to mobilize naturally-occurring constituents downgradient of the PRB.	Medium to high (for installation) - minimal O&M requirements if replacement is not necessary	Not retained for further analysis; a PRB cannot treat groundwater downgradient of the constructable alignment; there is minimal space available downgradient of the impacted wells; potential for increased maintenance due to potential biofouling and mineral precipitation.

TABLE 1
Evaluation of Remedial Technologies
 Georgia Power – Plant McDonough-Atkinson AP-1
 Atlanta, Georgia

Corrective Measure	REGULATORY CITATION FOR CRITERIA: 40 CFR 257.96(C)(1)			Retention Evaluation
	Institutional Requirements	Other Env. Or Public Health Requirements	Relative Costs	
Phyto Remediation (TreeWell®)	Deed restrictions may be necessary for groundwater areas upgradient of the TreeWell system. No other institutional requirements are expected at this time.	None expected at this point. Following installation, the remedy is passive and does not require external energy.	Medium (for installation) - minimal O&M requirements	Not retained for further analysis, little space available downgradient of the impacted wells for tree plantings. TreeWell® root system would likely impact the SVBW.
Subsurface Vertical Barrier Walls	Deed restrictions may be necessary for groundwater areas downgradient of the barrier wall until remedial goals are met. No other institutional requirements are expected at this time.	If groundwater extraction associated with barrier walls is necessary, above-ground treatment components may need to be present for an extended period of time, generating residuals requiring management and disposal. Groundwater extraction is not planned as part of the AEM.	Medium to high (depending on length and depth of wall)	Not retained for further evaluation. This methodology is currently undergoing permitting as part of closure methodology and therefore a second SVBW is not being considered for groundwater corrective action.

TABLE 2
SUMMARY OF MONITORING WELL, ASSESSMENT WELL AND PIEZOMETER CONSTRUCTION DATA
 Georgia Power Company - Plant McDonough
 Atlanta, Georgia

Well-ID	Hydraulic Location	Screened Media	NAD 83 Northing	NAD 83 Easting	Top of Casing Elevation (feet NAVD 88)	Ground Surface Elevation (feet NAVD 88)	Total Well Depth (feet bgs)	Top of Screen Elevation (feet NAVD 88)	Bottom of Screen Elevation (feet NAVD 88)	Screen Length (feet)	Date of Installation
ASH POND 1 (AP-1) DETECTION MONITORING WELL NETWORK											
DGWA-53	Upgradient	Upper Bedrock	1393472.8	2201668.8	844.26	841.3	28.9	823.7	813.7	10	9/24/2016
DGWA-70A	Upgradient	Overburden	1390481.4	2200591.6	808.52	805.8	59.3	756.9	746.9	10	5/10/2017
DGWA-71	Upgradient	Overburden	1393963.3	2201714.8	863.84	861.2	43.8	827.8	817.8	10	2/28/2017
DGWC-37	Downgradient	Overburden	1390482.2	2200919.8	766.21	763.7	39.7	734.4	724.4	10	11/28/2012
DGWC-38	Downgradient	Overburden	1390362.7	2201148.6	757.43	754.7	25.0	740.0	730.0	10	11/29/2012
DGWC-39	Downgradient	Overburden	1390303.6	2201540.1	759.89	757.0	21.2	746.2	736.2	10	11/6/2012
DGWC-40	Downgradient	Overburden	1390625.7	2201825.9	779.06	776.2	34.9	751.7	741.7	10	11/5/2012
DGWC-67	Downgradient	Overburden	1390953.8	2200830.7	766.70	767.0	56.3	720.7	710.7	10	3/14/2017
DGWC-68A	Downgradient	Overburden	1391301.2	2200734.9	765.33	765.4	29.8	746.0	736.0	10	4/20/2017
DGWC-69	Downgradient	Overburden	1391585.0	2200657.1	763.75	764.0	24.3	749.7	739.7	10	3/16/2017
ASH POND 1 (AP-1) ASSESSMENT MONITORING WELL NETWORK											
B-62	Downgradient	Upper Bedrock	1389828.1	2201811.2	760.08	760.4	39.9	730.7	720.7	10	10/4/2016
B-100	Downgradient	Overburden	1390254.8	2202242.1	777.95	775.3	44.8	740.5	730.5	10	7/8/2020
B-105D	Downgradient	Upper Bedrock	1390634.5	2201831.9	779.01	776.0	70.00	716.0	706.0	10	10/19/2020
B-112D	Downgradient	Upper Bedrock	1391564.2	2200664.1	765.58	766.1	55	721.4	711.4	10	3/22/2021
B-113D	Downgradient	Upper Bedrock	1391264.6	2200719.2	758.22	758.8	85	684.4	674.4	10	3/30/2021

TABLE 2
SUMMARY OF MONITORING WELL, ASSESSMENT WELL AND PIEZOMETER CONSTRUCTION DATA
 Georgia Power Company - Plant McDonough
 Atlanta, Georgia

Well-ID	Hydraulic Location	Screened Media	NAD 83 Northing	NAD 83 Easting	Top of Casing Elevation (feet NAVD 88)	Ground Surface Elevation (feet NAVD 88)	Total Well Depth (feet bgs)	Top of Screen Elevation (feet NAVD 88)	Bottom of Screen Elevation (feet NAVD 88)	Screen Length (feet)	Date of Installation
ASH POND 2 and ASH PONDS 3/4 (AP-2, 3/4) DETECTION MONITORING WELL NETWORK											
DGWA-53	Upgradient	Upper Bedrock	1393472.8	2201668.8	844.26	841.3	28.9	823.7	813.7	10	9/24/2016
DGWA-70A	Upgradient	Overburden	1390481.4	2200591.6	808.52	805.8	59.3	756.9	746.9	10	5/10/2017
DGWA-71	Upgradient	Overburden	1393963.3	2201714.8	863.84	861.2	43.8	827.8	817.8	10	2/28/2017
DGWC-2	Downgradient	Overburden/Upper Bedrock	1393958.0	2202119.5	850.88	848.3	49.0	809.6	799.6	10	10/2/2012
DGWC-4	Downgradient	Overburden	1394171.5	2202662.4	814.85	812.1	45.0	777.4	767.4	10	10/3/2012
DGWC-5	Downgradient	Overburden/Upper Bedrock	1394306.3	2202965.1	791.75	788.7	30.0	769.0	759.0	10	10/4/2012
DGWC-8	Downgradient	Overburden	1394322.2	2203882.1	826.38	824.1	49.1	785.4	775.4	10	10/10/2012
DGWC-9	Downgradient	Overburden	1394055.9	2204170.0	824.35	821.8	30.0	802.2	792.2	10	10/10/2012
DGWC-10	Downgradient	Overburden	1393818.3	2204201.1	823.55	820.9	45.4	785.9	775.9	10	10/11/2012
DGWC-11	Downgradient	Overburden	1393547.1	2204166.2	800.57	798.1	49.1	759.3	749.3	10	10/15/2012
DGWC-12	Downgradient	Overburden	1393149.4	2204128.3	773.86	771.2	25.1	756.5	746.5	10	10/15/2012
DGWC-13	Downgradient	Overburden	1392881.1	2204084.6	794.10	791.3	43.8	757.9	747.9	10	11/29/2012
DGWC-14	Downgradient	Overburden/Upper Bedrock	1392574.2	2204013.3	792.40	789.8	34.3	765.9	755.9	10	12/18/2012
DGWC-15	Downgradient	Overburden	1392544.1	2203679.0	824.50	821.5	67.1	764.8	754.8	10	11/29/2012
DGWC-17	Downgradient	Overburden	1392645.6	2203051.0	837.05	834.2	44.5	800.0	790.0	10	1/9/2013
DGWC-19	Downgradient	Overburden	1392342.6	2202601.0	825.46	822.9	39.8	793.5	783.5	10	3/12/2013
DGWC-20	Downgradient	Overburden	1392164.5	2202315.6	822.14	819.8	39.7	790.7	780.7	10	3/5/2013
DGWC-21	Downgradient	Overburden/Upper Bedrock	1392067.5	2202063.5	816.28	813.5	69.0	754.9	744.9	10	10/31/2012
DGWC-22	Downgradient	Upper Bedrock	1392126.3	2201791.9	816.59	813.7	60.0	764.0	754.0	10	10/25/2012
DGWC-23	Downgradient	Upper Bedrock	1392239.7	2201582.0	818.37	815.7	60.1	765.9	755.9	10	10/25/2012
DGWC-42	Downgradient	Overburden	1391327.8	2201870.2	804.68	802.0	50.4	762.1	752.1	10	11/12/2012
DGWC-47	Downgradient	Overburden/Upper Bedrock	1391553.8	2202610.5	797.45	794.3	28.8	775.9	765.9	10	6/23/2016
DGWC-48	Downgradient	Overburden/Upper Bedrock	1391314.6	2202290.2	788.33	785.2	30.0	765.6	755.6	10	6/22/2016

TABLE 2
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 Georgia Power Company - Plant McDonough
 Atlanta, Georgia

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ASH POND 2 and ASH PONDS 3/4 (AP-2, 3/4) ASSESSMENT MONITORING WELL NETWORK											
B-56	Downgradient	Overburden	1393957.9	2204187.8	823.59	821.0	45.0	786.4	776.4	10	10/3/2016
B-62	Downgradient	Upper Bedrock	1389828.1	2201811.2	760.08	760.4	39.9	730.7	720.7	10	10/4/2016
B-63	Downgradient	Overburden	1390999.1	2202978.1	777.10	777.3	46.0	741.8	731.8	10	10/6/2016
B-66	Downgradient	Overburden	1393858.2	2204277.5	815.90	813.3	55.3	768.3	758.3	10	11/16/2016
B-77	Downgradient	Overburden	1390948.7	2202942.0	776.86	777.1	42	745.1	735.1	10	9/17/2019
B-82	Downgradient	Overburden	1393750.0	2204258.1	810.07	807.5	45	773.0	763.0	10	9/21/2019
B-83	Downgradient	Overburden	1390735.5	2202695.6	776.98	777.1	48.6	738.5	728.5	10	9/30/2019
B-88	Downgradient	Overburden	1394401.1	2203738.3	820.07	817.0	72	755.0	745.0	10	11/15/2019
B-92	Downgradient	Overburden	1394392.7	2203026.7	785.08	785.3	24.6	770.7	760.7	10	12/11/2019
B-93	Downgradient	Overburden	1394348.7	2202946.7	789.07	789.2	28.9	770.3	760.3	10	12/12/2019
B-97	Downgradient	Overburden/Upper Bedrock	1394430.0	2203008.3	786.29	786.6	31	765.3	755.3	10	2/11/2020
B-98	Downgradient	Overburden	1394392.5	2202934.0	789.67	789.8	19.4	780.8	770.8	10	2/10/2020
B-100	Downgradient	Overburden	1390254.8	2202242.1	777.95	775.3	44.8	740.5	730.5	10	7/8/2020
B-101D	Downgradient	Overburden/Upper Bedrock	1394063.6	2204168.2	824.29	821.2	75.00	756.3	746.3	10	11/12/2020
B-102D	Downgradient	Upper Bedrock	1393828.4	2204200.4	823.42	820.6	85.00	746.2	736.2	10	11/10/2020
B-104D	Downgradient	Upper Bedrock	1391318.3	2202298.5	787.90	785.3	60.00	735.3	725.3	10	10/20/2020
B-106D	Downgradient	Upper Bedrock	1394327.1	2203869.2	826.21	823.5	80.00	754.1	744.1	10	11/13/2020
B-107D	Downgradient	Upper Bedrock	1392334.5	2202596.4	823.38	820.6	85.75	745.5	735.5	10	10/28/2020
B-108D	Downgradient	Upper Bedrock	1392156.1	2202312.5	821.13	818.4	80.00	749.4	739.4	10	10/27/2020
B-109D	Downgradient	Upper Bedrock	1393957.5	2202127.0	850.73	847.8	100.00	758.4	748.4	10	10/31/2020
B-111D	Downgradient	Upper Bedrock	1394303.4	2202956.4	791.87	789.1	85.00	714.9	704.9	10	11/3/2020
B-115D	Downgradient	Upper Bedrock	1391265.3	2202580.7	789.17	786.4	80	717.2	707.2	10	3/20/2021
B-120D	Downgradient	Upper Bedrock	1394047.2	2202436.4	836.42	834.0	70	775.0	765.0	10	3/6/2021

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 Atlanta, Georgia

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ASH POND 1, ASH POND 2 AND ASH POND 3/4 SUPPLEMENTAL SAMPLING NETWORK											
B-90	Downgradient	Overburden	1394501.0	2203212.6	784.00	784.2	33.4	760.8	750.8	10	12/10/2019
B-91	Downgradient	Overburden	1394447.1	2203123.9	782.98	783.1	34.6	758.5	748.5	10	12/11/2019
B-95	Downgradient	Overburden	1394518.6	2203167.7	784.00	784.3	33.3	761.3	751.3	10	2/11/2020
B-96	Downgradient	Overburden	1394478.7	2203099.3	784.92	785.3	33.1	762.2	752.2	10	2/10/2020
B-99	Downgradient	Overburden	1394524.2	2203084.5	782.39	782.6	12.3	775.3	770.3	5	7/7/2020
B-116D	Upgradient	Upper Bedrock	1390483.7	2200611.0	807.82	805.3	90	726.1	716.1	10	3/8/2021
B-117D	Upgradient	Upper Bedrock	1393963.8	2201727.3	863.82	861.2	75	796.5	786.5	10	3/17/2021
B-118	Upgradient	Upper Bedrock	1391219.3	2200449.7	807.70	805.0	75	740.2	730.2	10	3/9/2021
B-119D	Upgradient	Upper Bedrock	1391236.4	2200446.6	807.15	804.5	105	709.8	699.8	10	3/16/2021
PIEZOMETERS											
B-3	Downgradient	Overburden/Upper Bedrock	1394045.1	2202411.5	837.78	835.0	37.0	808.3	798.3	10	10/3/2012
B-6	Downgradient	Overburden	1394419.5	2203266.5	789.47	786.5	35.4	761.5	751.5	10	10/9/2012
B-7	Downgradient	Overburden	1394374.6	2203596.1	809.16	806.1	25.2	791.3	781.3	10	10/9/2012
B-16	Downgradient	Overburden	1392595.1	2203315.4	826.47	823.6	43.7	790.2	780.2	10	12/19/2012
B-18	Downgradient	Overburden	1392521.0	2202875.5	826.56	823.9	32.6	801.5	791.5	10	1/10/2013
B-24	Downgradient	Upper Bedrock	1392479.9	2201450.0	822.11	819.3	79.1	751.0	741.0	10	10/24/2012
B-25	Downgradient	Upper Bedrock	1392813.3	2201502.7	836.54	833.5	54.8	789.1	779.1	10	10/24/2012
B-26	Downgradient	Upper Bedrock	1393105.6	2201550.4	853.60	850.6	49.3	811.7	801.7	10	10/23/2012
B-28	Downgradient	Overburden/Upper Bedrock	1391967.4	2201679.2	816.08	813.3	69.4	754.3	744.3	10	10/31/2012
B-29	Downgradient	Overburden	1391890.0	2201422.0	816.43	813.5	54.4	769.4	759.4	10	1/11/2013
B-31	Downgradient	Upper Bedrock	1392034.3	2200928.5	797.47	794.9	45.1	760.2	750.2	10	1/22/2013
B-41	Downgradient	Overburden	1390920.8	2201751.9	795.20	792.4	60.0	743.0	733.0	10	11/14/2012
B-50	Downgradient	Overburden	1391657.1	2201841.0	809.67	809.2	36.0	784.4	774.4	10	6/24/2016
B-51	Downgradient	Overburden	1390501.2	2200906.5	765.92	763.3	65.0	708.3	698.3	10	6/27/2016
B-52	Downgradient	Overburden	1392308.3	2201314.8	822.89	820.3	50.0	781.4	771.4	10	9/28/2016

TABLE 2
SUMMARY OF MONITORING WELL, ASSESSMENT WELL AND PIEZOMETER CONSTRUCTION DATA
 Georgia Power Company - Plant McDonough
 Atlanta, Georgia

Well-ID	Hydraulic Location	Screened Media	NAD 83 Northing	NAD 83 Easting	Top of Casing Elevation (feet NAVD 88)	Ground Surface Elevation (feet NAVD 88)	Total Well Depth (feet bgs)	Top of Screen Elevation (feet NAVD 88)	Bottom of Screen Elevation (feet NAVD 88)	Screen Length (feet)	Date of Installation
PIEZOMETERS											
B-54	Downgradient	Overburden/Upper Bedrock	1394423.5	2203140.7	785.46	782.6	34.2	758.8	748.8	10	9/26/2016
B-55	Downgradient	Overburden	1394142.6	2204147.9	825.12	822.9	52.0	781.9	771.9	10	9/22/2016
B-57	Downgradient	Upper Bedrock	1391396.3	2202736.9	789.04	786.0	50.5	746.0	736.0	10	9/24/2016
B-58	Downgradient	Overburden	1391125.7	2202426.5	788.17	785.2	45.0	750.7	740.7	10	9/23/2016
B-59	Downgradient	Overburden/Upper Bedrock	1394349.1	2203001.1	788.00	785.5	30.3	765.3	755.3	10	9/23/2016
B-60	Downgradient	Overburden	1391100.7	2202881.6	782.13	779.2	49.8	739.9	729.9	10	9/29/2016
B-61	Downgradient	Overburden	1390957.8	2202505.8	782.09	779.0	51.9	737.5	727.5	10	9/29/2016
B-64	Downgradient	Overburden	1394381.9	2203031.3	785.83	786.1	30.4	766.1	756.1	10	11/2/2016
B-65	Downgradient	Overburden/Upper Bedrock	1394381.2	2204050.8	821.95	822.3	45.4	787.9	777.9	10	11/15/2016
B-68	Downgradient	Overburden	1391298.2	2200714.2	758.68	759.0	18.0	751.0	741.0	10	3/16/2017
B-72	Downgradient	Overburden	1391242.2	2200723.9	758.85	758.09	21.9	746.6	736.6	10	4/19/2017
B-73	Downgradient	Overburden	1391352.4	2200697.5	759.46	758.85	15.8	753.5	743.5	10	4/19/2017
B-74	Downgradient	Overburden	1391279.8	2200665.3	759.44	758.96	16.5	748.2	743.2	5	4/25/2017
B-78	Downgradient	Overburden/Upper Bedrock	1394328.2	2202958.2	790.75	788.0	30	768.0	758.5	10	9/22/2019
B-79	Downgradient	Overburden	1394458.6	2203223.0	788.66	785.9	34.93	761.0	751.5	10	9/21/2019
B-80	Downgradient	Overburden	1394372.6	2203533.9	804.47	801.8	30	782.0	772.5	10	9/20/2019
B-81	Downgradient	Overburden	1394364.9	2203741.1	820.56	817.7	50	778.5	768.5	10	9/22/2019
B-84	Downgradient	Overburden	1390411.9	2202241.9	776.34	776.6	49.1	737.5	727.5	10	10/1/2019
B-85	Downgradient	Overburden/Upper Bedrock	1394433.4	2203134.5	782.54	782.7	34.5	758.5	748.5	10	11/18/2019
B-86	Downgradient	Overburden/Upper Bedrock	1394480.0	2203206.6	784.29	784.6	34.1	760.5	750.5	10	11/18/2019

TABLE 2
SUMMARY OF MONITORING WELL, ASSESSMENT WELL AND PIEZOMETER CONSTRUCTION DATA
 Georgia Power Company - Plant McDonough
 Atlanta, Georgia

Well-ID	Hydraulic Location	Screened Media	NAD 83 Northing	NAD 83 Easting	Top of Casing Elevation (feet NAVD 88)	Ground Surface Elevation (feet NAVD 88)	Total Well Depth (feet bgs)	Top of Screen Elevation (feet NAVD 88)	Bottom of Screen Elevation (feet NAVD 88)	Screen Length (feet)	Date of Installation
PIEZOMETERS											
B-87	Downgradient	Overburden	1394401.9	2203531.3	803.37	800.4	42	768.7	758.7	10	11/17/2019
B-89	Downgradient	Upper Bedrock	1394398.4	2204049.4	822.36	822.6	49.5	783.1	773.1	10	11/19/2019
B-94	Downgradient	Overburden	1394402.0	2203513.7	801.74	799.2	45.24	764.6	754.6	10	1/23/2020
B-103D	Downgradient	Upper Bedrock	1391543.5	2202614.4	795.96	793.8	70.00	733.8	723.8	10	10/15/2020
B-110D	Downgradient	Upper Bedrock	1391294.4	2200736.0	764.61	764.7	65.00	711.7	701.7	10	11/17/2020

Notes:

1. bgs = below ground surface
2. Coordinate System: NAD 1983 State Plane Georgia West (U.S. feet)
3. NAD - North American Datum; NAVD - North American Vertical Datum

TABLE 3
Analytical Data Summary of Test Pit Sampling - February 2021
 Georgia Power Company - Plant McDonough
 Atlanta, Georgia

Constituent	CAS ID	Sample ID	TP-11-5-8'	TP-12-2-5'	TP-8-6-7.5'	TP-9-6-8'
		Date	2/23/2021	2/23/2021	2/23/2021	2/23/2021
		Units				
Aluminum	7429-90-5	mg/kg	7880	8930	20500	11600
Antimony	7440-36-0	mg/kg	<0.48	<0.43	<2.9	<0.51
Arsenic	7440-38-2	mg/kg	<0.32	<0.28	<0.39	<0.34
Barium	7440-39-3	mg/kg	33.5	41.2	215	24.6
Beryllium	7440-41-7	mg/kg	0.44	0.67	1.4	0.29
Boron	7440-42-8	mg/kg	<0.53	<0.47	<0.64	<0.56
Cadmium	7440-43-9	mg/kg	0.10	0.12	0.58	0.046 J
Chromium	7440-47-3	mg/kg	6.2	3.0	33.7	3.3
Cobalt	7440-48-4	mg/kg	1.3	1.9	12.4	0.59 J
Iron	7439-89-6	mg/kg	7600	5130	27300	2350
Lead	7439-92-1	mg/kg	4.6	5.7	7.0	6.8
Lithium	7439-93-2	mg/kg	<8.9	<7.9	18.3 J	<9.4
Manganese	7439-96-5	mg/kg	38.6	217	1140	22.1
Molybdenum	7439-98-7	mg/kg	<0.32	4.8	1.5	0.98
Selenium	7782-49-2	mg/kg	<0.48	<0.43	<0.59	<0.51
Strontium	7440-24-6	mg/kg	4.2	3.3	9.8	1.6
Thallium	7440-28-0	mg/kg	<0.48	<0.43	<2.9	<0.51

Notes:

1. mg/kg - milligrams per kilogram (mg/kg).
2. < indicates the substance was not detected above the analytical method detection limit (MDL). The value displayed is the laboratory reporting limit (RL).
3. "J" indicates the substance was detected at such low levels that the precision of the laboratory instruments could not produce a reliable value. Therefore, the value displayed (value J) is qualified by the laboratory as an estimated number.

TABLE 4
Proposed ACM Supplementary Data Collection Tasks for January through June 2022
 Georgia Power – Plant McDonough-Atkinson AP-1
 Atlanta, Georgia

Data Collection Event	Applicable CMs	Applicability / Rationale	Field Component	Parameters of Interest (POI)
Groundwater Sampling	ISI MNA	(i) Evaluation of attenuation mechanisms and rates and aquifer capacity for attenuation. (ii) Continue sampling to provide sufficient data for statistical analyses at assessment wells. (iii) Determine the viability of in-situ injections for remedy selection.	Collect groundwater samples from existing well network currently sampled under the assessment monitoring program as well as additional site piezometers within migration pathway.	In addition to routine App III/IV parameters; sulfide, iron, manganese, magnesium, sodium, potassium, bicarbonate alkalinity, dissolved organic carbon (DOC), and total hardness to be collected at select locations. Additional volume to be collected for Jar/column test to be performed at select locations (DGWC-68A, DGWC-69, DGWC-40, DGWC-19, DGWC-20).
Geochemical Modeling	ISI MNA	MNA as a component of Final Remedy Selection Support development of injection media for ISI	No Field Component: Phase II & III geochemical modeling and assessment.	Geochemical modeling performed to evaluate the cause of the cobalt exceedance at well DGWC-40 and the likelihood that it is due to consistently low pH in that area (<5.0), while near to and surrounding AP-1 have a higher pH (5.5 to 7.0).
Groundwater Flow Modeling	P&T MNA ISI	Development of the groundwater flow model can be used to evaluate potential radius of influence for geochemical injections; the effects of P&T or	No Field Component. (Desktop Study)	Groundwater flow modeling performed to evaluate various potential treatments including potential in-situ treatment and hydraulic containment.

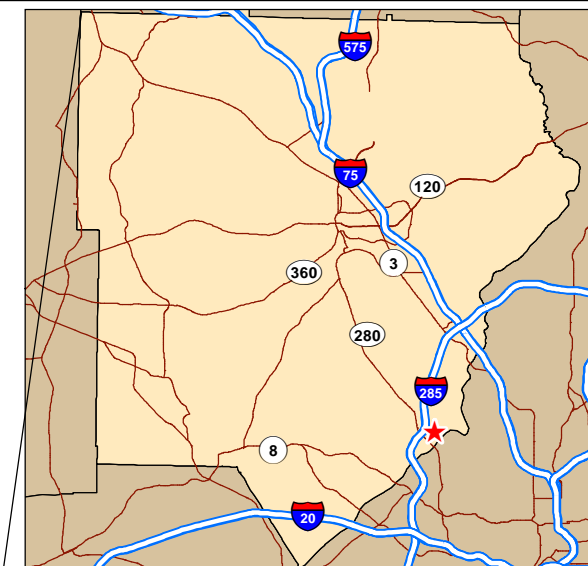
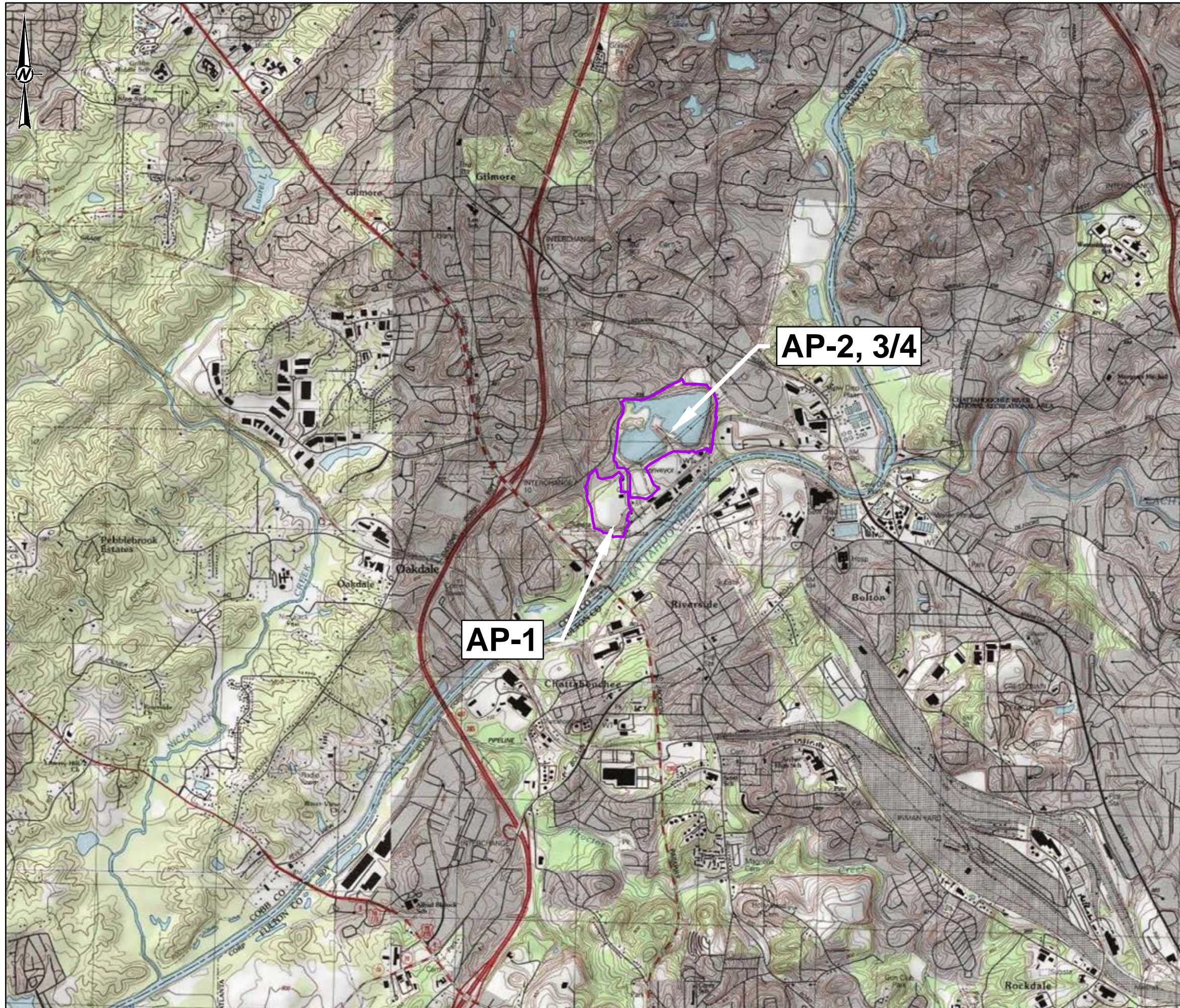
Applicable Corrective Measures (CM Retained):

ISI - Geochemical Approaches (In-Situ Injection)

P&T - Hydraulic Containment (Pump and Treat)

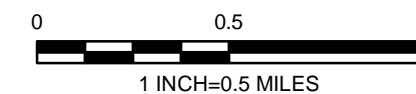
MNA - Monitored Natural Attenuation

FIGURES



REFERENCE

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 PLANT MCDONOUGH



PROJECT
 SEMI-ANNUAL REMEDY SELECTION AND DESIGN PROGRESS
 REPORT PLANT MCDONOUGH-ATKINSON ASH POND 1

TITLE
SITE LOCATION MAP

CONSULTANT	YYYY-MM-DD	2019-1-31
	PREPARED	SEB
	DESIGN	SEB
	CHECKED	DP
	REVIEWED/APPROVED	RPK

PROJECT No.
 166849618

Rev.
 0

FIGURE
 1

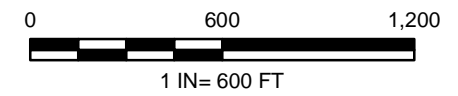
IF THIS MEASUREMENT DOES NOT MATCH WHAT IS SHOWN, THE SHEET HAS BEEN MODIFIED FROM ANS/B



- LEGEND**
- ◆ AP-1 MONITORING WELL
 - ◆ AP-2,3/4 MONITORING WELL
 - ◆ UPGRADIENT WELL
 - ◆ ASSESSMENT MONITORING WELLS
 - ◆ PIEZOMETER
 - ◆ DEWATERING WELL
 - ◆ SURFACE WATER MONITORING LOCATION
 - ▲ TEST PIT LOCATIONS
 - STAFF GAUGE
 - PROPERTY BOUNDARY
 - PERMIT BOUNDARY

NOTES
 1. ALL LOCATIONS AND BOUNDARIES ARE APPROXIMATE.

REFERENCE
 1. AERIAL IMAGE DATED NOVEMBER 2019 FROM GOOGLE EARTH AND AUGUST 04, 2021 AND OCTOBER 08, 2021 FROM COOPER, BARNETTE & PAGE, INC. (CBP).
 2. COORDINATE SYSTEM: NAD 1983 STATE PLANE GEORGIA WEST (U.S. FEET).
 3. MONITORING WELL/PIEZOMETER LOCATIONS AND ELEVATIONS SURVEYED BY METRO ENGINEERING AND SURVEYING COMPANY IN AUGUST 2020 WITH ADDITIONAL SURVEY PROVIDED IN JANUARY 2021 AND MAY 2021.



CLIENT
 GEORGIA POWER COMPANY
 PLANT MCDONOUGH



PROJECT
 SEMI-ANNUAL REMEDY SELECTION AND DESIGN PROGRESS
 REPORT PLANT MCDONOUGH-ATKINSON ASH POND 1

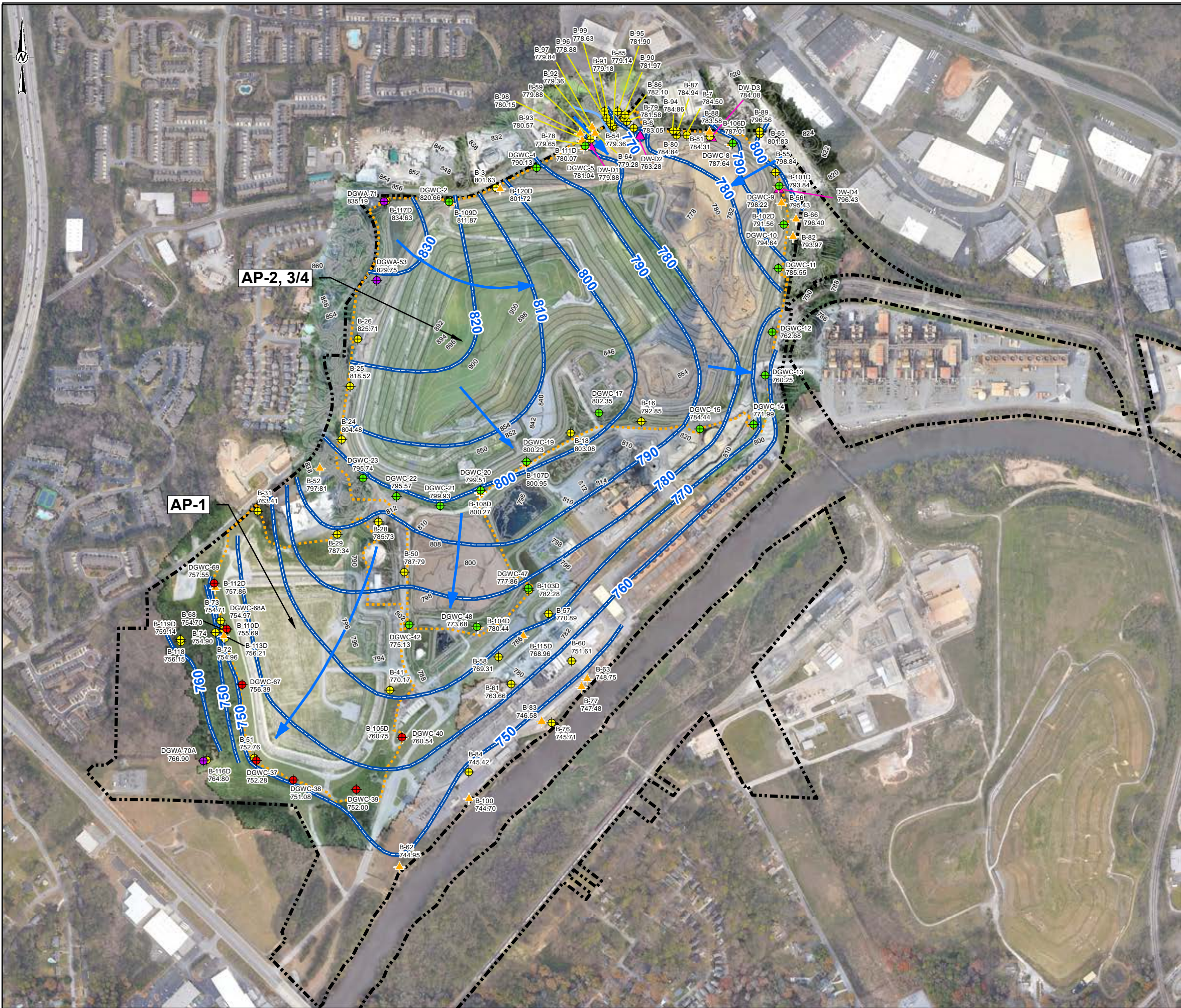
MONITORING WELL, PIEZOMETER AND SURFACE WATER LOCATION MAP

CONSULTANT	YYYY-MM-DD	2022-02-02
	PREPARED	DJC
	DESIGN	DLP
	CHECKED	DP/RPK
	REVIEWED/APPROVED	RPK

PROJECT No. 166849621 Rev. 0 FIGURE 2

Path: C:\Users\laboude\Golder\Associates\166849621_SCS Plant McDonough GW Cons Svcs_GA - 800_Shapefiles\MXD\Remedy Selection Work Plain\Figure 2 - Proposed Investigation Location Map.mxd

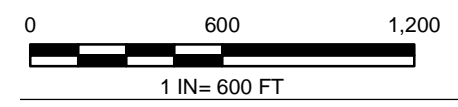
ALL MEASUREMENTS ARE APPROXIMATE. THE MEASUREMENT DOES NOT MATCH WHAT IS SHOWN. THIS SHEET HAS BEEN MODIFIED FROM ANS.B



- LEGEND**
- AP-1 MONITORING WELL
 - AP-2,3/4 MONITORING WELL
 - UPGRADIENT WELL
 - ▲ ASSESSMENT MONITORING WELLS
 - PIEZOMETER
 - ▲ DEWDATERING WELL
 - ➔ APPROXIMATE GROUNDWATER FLOW DIRECTION
 - GROUNDWATER SURFACE CONTOUR (FT-NAVD)
 - SURFACE WATER STREAM
 - PERMIT BOUNDARY
 - PROPERTY BOUNDARY
 - EXISTING TOPOGRAPHY 10-FOOT CONTOUR
 - EXISTING TOPOGRAPHY 2-FOOT CONTOUR

- NOTES**
1. ALL LOCATIONS AND BOUNDARIES ARE APPROXIMATE.
 2. GROUNDWATER ELEVATION MEASUREMENTS OBTAINED OCTOBER 27, 2021 BY GOLDER ASSOCIATES.
 3. GROUNDWATER ELEVATIONS DISPLAYED IN FEET REFERENCED TO NORTH AMERICAN VERTICAL DATUM (FT NAVD).
 4. WELLS THAT CONTAIN A "D" DESIGNATION FOLLOWING THE NUMBER ARE DEEP WELLS AND ELEVATIONS ARE NOT USED FOR CONTOURING.

- REFERENCE**
1. AERIAL IMAGE DATED NOVEMBER 2019 FROM GOOGLE EARTH AND AUGUST 04, 2021 AND OCTOBER 08, 2021 FROM COOPER, BARNETTE & PAGE, INC. (CBP).
 2. COORDINATE SYSTEM: NAD 1983 STATE PLANE GEORGIA WEST (U.S. FEET).
 3. MONITORING WELL/PIEZOMETER LOCATIONS AND ELEVATIONS SURVEYED BY METRO ENGINEERING AND SURVEYING COMPANY IN AUGUST 2020 WITH ADDITIONAL SURVEY PROVIDED IN JANUARY 2021 AND MAY 2021.



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PROJECT
 SEMI-ANNUAL REMEDY SELECTION AND DESIGN PROGRESS
 REPORT PLANT MCDONOUGH-ATKINSON ASH POND 1

TITLE
SITE POTENTIOMETRIC MAP – OCTOBER 27, 2021

CONSULTANT	YYYY-MM-DD	2021-10-29
	PREPARED	SEB
	DESIGN	SEB
	CHECKED	BAS
	REVIEWED/APPROVED	RPK

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IF THIS MEASUREMENT DOES NOT MATCH WHAT IS SHOWN, THE SHEET HAS BEEN MODIFIED FROM ANSIB



LEGEND

- ◆ AP-1 MONITORING WELL
- ◆ AP-2,3/4 MONITORING WELL
- ◆ UPGRADIENT WELL
- ◆ ASSESSMENT MONITORING WELLS
- ◆ PIEZOMETER
- ◆ SURFACE WATER MONITORING LOCATION
- COBALT GWPS ISOCONCENTRATION CONTOUR
- - - COBALT GWPS ISOCONCENTRATION CONTOUR (INFERRED)
- INFERRED POTENTIOMETRIC SURFACE CONTOUR (OCT 2021)
- - - PROPERTY BOUNDARY
- PERMIT BOUNDARY

- NOTES**
1. ALL LOCATIONS AND BOUNDARIES ARE APPROXIMATE
 2. GROUNDWATER AND SURFACE WATER CONCENTRATIONS IN MILLIGRAMS PER LITER (MG/L). GWPS = GROUNDWATER PROTECTION STANDARD. RSL = (FEDERAL REGIONAL SCREENING LEVEL)
 3. DATA SHOWN REPRESENT THE SEPTEMBER 2021 SEMI-ANNUAL MONITORING EVENT RESULTS AS WELL AS APPLICABLE DELINEATION WELL DATA. SURFACE WATER SAMPLES COLLECTED BY ARCADIS ON SEPTEMBER 21, 2021.
 4. GWPS IS EQUAL TO SITE SPECIFIC BACKGROUND CONCENTRATION AS THERE IS NO MCL AND THE RSL IS BELOW SITE SPECIFIC BACKGROUND CONCENTRATION.
 5. DEEP WELL ANALYTICAL RESULTS NOT USED FOR ISOCONCENTRATION CONTOURING.
 6. DGWC-68A WAS RESAMPLED OCTOBER 27, 2021.
 7. POTENTIOMETRIC SURFACE DETERMINED USING OCTOBER 2021 WATER LEVELS.

Analyte	Units	GWPS
Cobalt	mg/L	0.0322

- REFERENCE**
1. SERVICE LAYER CREDITS: AERIAL IMAGE DATED NOVEMBER 2019 FROM GOOGLE EARTH AND AUGUST 04, 2021 AND OCTOBER 8, 2021 FROM COOPER, BARNETTE & PAGE, INC. (CBP).
 2. COORDINATE SYSTEM: NAD 1983 STATE PLANE GEORGIA WEST (U.S. FEET).
 3. MONITORING WELL/PIEZOMETER LOCATIONS AND ELEVATIONS SURVEYED BY METRO ENGINEERING AND SURVEYING COMPANY IN AUGUST 2020 WITH ADDITIONAL SURVEY PROVIDED IN JANUARY 2021 AND MAY 2021.
- 0 300 600
- 1 IN = 300 FT

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 PLANT MCDONOUGH

PROJECT
 SEMI-ANNUAL REMEDY SELECTION AND DESIGN PROGRESS
 REPORT PLANT MCDONOUGH-ATKINSON ASH POND 1

TITLE
**COBALT ISOCONCENTRATION CONTOUR MAP -
 SEPTEMBER 2021**

CONSULTANT
GOLDER
 MEMBER OF WSP

YYYY-MM-DD	2021-11-08
PREPARED	SEB
DESIGN	DLP
CHECKED	RPK
REVIEWED/APPROVED	RPK

PROJECT No.
 166849621

Rev.
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FIGURE
5

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THIS MEASUREMENT DOES NOT MATCH WHAT IS SHOWN. THE SHEET HAS BEEN MODIFIED FROM ANS/B



LEGEND

- ◆ AP-1 MONITORING WELL
- ◆ AP-2,3/4 MONITORING WELL
- ◆ UPGRADIENT WELL
- ◆ ASSESSMENT MONITORING WELLS
- ◆ PIEZOMETER
- ◆ SURFACE WATER MONITORING LOCATION
- 0.0409 MOLYBDENUM GWPS ISOCONCENTRATION CONTOUR
- INFERRED POTENTIOMETRIC SURFACE CONTOUR (OCT 2021)
- - - PROPERTY BOUNDARY
- PERMIT BOUNDARY

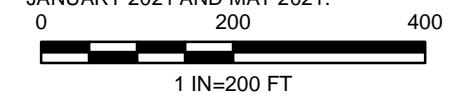
NOTES

1. ALL LOCATIONS AND BOUNDARIES ARE APPROXIMATE
2. GROUNDWATER AND SURFACE WATER CONCENTRATIONS IN MILLIGRAMS PER LITER (MG/L)
3. DATA SHOWN REPRESENT THE SEPTEMBER 2021 SEMI-ANNUAL MONITORING EVENT RESULTS AS WELL AS APPLICABLE DELINEATION WELL DATA. SURFACE WATER SAMPLES COLLECTED BY ARCADIS ON SEPTEMBER 21, 2021.
4. GWPS IS EQUAL TO SITE SPECIFIC BACKGROUND CONCENTRATION AS THERE IS NO MCL AND THE RSL IS BELOW SITE SPECIFIC BACKGROUND CONCENTRATION.
5. DEEP WELL ANALYTICAL RESULTS NOT USED FOR ISOCONCENTRATION CONTOURING.
6. DGWC-68A WAS RESAMPLED OCTOBER 27, 2021.
7. POTENTIOMETRIC SURFACE DETERMINED USING OCTOBER 2021 WATER LEVELS.

Analyte	Units	FED GWPS	STATE GWPS
Molybdenum	mg/L	0.1	0.0409

REFERENCE

1. SERVICE LAYER CREDITS: AERIAL IMAGE DATED NOVEMBER 2019 FROM GOOGLE EARTH AND AUGUST 04, 2021 AND OCTOBER 8, 2021 FROM COOPER, BARNETTE & PAGE, INC. (CBP).
2. COORDINATE SYSTEM: NAD 1983 STATE PLANE GEORGIA WEST (U.S. FEET).
3. MONITORING WELL/PIEZOMETER LOCATIONS AND ELEVATIONS SURVEYED BY METRO ENGINEERING AND SURVEYING COMPANY IN AUGUST 2020 WITH ADDITIONAL SURVEY PROVIDED IN JANUARY 2021 AND MAY 2021.



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 PLANT MCDONOUGH



PROJECT
 SEMI-ANNUAL REMEDY SELECTION AND DESIGN PROGRESS
 REPORT PLANT MCDONOUGH-ATKINSON ASH POND 1

TITLE
**MOLYBDENUM ISOCONCENTRATION CONTOUR MAP -
 SEPTEMBER 2021**

CONSULTANT	YYYY-MM-DD	2021-11-08
	PREPARED	SEB
	DESIGN	DLP
	CHECKED	RPK
	REVIEWED/APPROVED	RPK

PROJECT No. 166849621 Rev. 0 FIGURE 6

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IF THIS MEASUREMENT DOES NOT MATCH WHAT IS SHOWN, THE SHEET HAS BEEN MODIFIED FROM ANSIB

APPENDIX A

WELL SURVEY / EDR GEOCHECK® REPORT

WELL SURVEY

Plant McDonough-Atkinson is in Cobb County, GA south of the city of Smyrna and on a northern bank of the Chattahoochee River.

Golder has conducted a well survey of groundwater wells within a two-mile radius of the Coal Combustion Residual (CCR) facilities at Plant McDonough Ash Ponds 1, 2, and 3/4

This survey included the collection and review of information obtained from a variety of Federal, State, and County resources and public records databases. Identified well data were compiled into a geographic information system (GIS) database.

Information Collection

This section summarizes the appropriate sources used for identifying groundwater wells within the area of investigation.

- 1) Federal Sources
 - a) United States Geological Survey (USGS). The USGS maintains an inventory of both qualitative and quantitative water data through the National Water Information System (NWIS). Well information including coordinates were downloaded and compiled into GIS. The type of data within the area of investigation included groundwater wells and surface water intake and outfall on the Chattahoochee River.
 - b) Safe Drinking Water Information System (SDWIS). This database is managed by the EPA and contains information regarding public water source providers but does not contain geospatial data or well location information. This source was used to determine that the primary supplier of public water in the area of investigation is the Cobb County Water System.
- 2) State Sources - Georgia Environmental Protection Division
 - a) Drinking Water Branch. Records concerning industrial and municipal wells are maintained by the EPD and made available through a Georgia Open Records Act (GORA) request. Linda Weglewski of EPD was contacted by email on November 17th, 2021, regarding information on groundwater wells within the area of investigation. There are no permitted public groundwater wells within the requested 2-mile radius.
 - b) EPD Pesticide Project. From 2000 to 2004 the EPD coordinated with the Georgia Department of Agriculture (GDA) to sample monitoring wells and private drinking wells across the State of Georgia for potential pesticide contaminants. The final project report contains a list of private drinking water wells and their GPS coordinates. Golder contacted Chris Hutcheson with Cobb & Douglas Public Health. No Response was received following this request.
 - c) Hazardous Site Inventory (HSI) files. EPD manages HSI files for those sites necessitating or undergoing state coordinated corrective action. No listings were reported in the GORA request.

d) Hazardous Site Response Act (HSRA) notifications. EPD manages HSRA notification documentation which includes reports submitted after release of reportable substances. No listings were reported in the GORA request.

3) County Sources

a) Health Department Records. As part of the Georgia Department of Public Health (DPH) county health departments maintain records of septic system permits. These permits indicate whether a private or public water supply is used at the address. Golder reached out to Cobb County DPH on 1/26/2022 via email. No septic drawings, approved water wells or complaint history was available for the property.

b) Water Departments. Cobb County Water was contacted on 01/26/2022 for their records regarding groundwater wells or public water supply by residents within the area of investigation. They informed us that they are not involved in the permitting and record-keeping of groundwater wells of any type.

Plant McDonough

5551 S Cobb Drive
Atlanta, GA 30339

Inquiry Number: 6754839.7s

November 17, 2021

The EDR GeoCheck® Report



6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

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Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

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GEOCHECK® - PHYSICAL SETTING SOURCE REPORT

TARGET PROPERTY ADDRESS

PLANT MCDONOUGH
5551 S COBB DRIVE
ATLANTA, GA 30339

TARGET PROPERTY COORDINATES

Latitude (North):	33.826695 - 33° 49' 36.10"
Longitude (West):	84.477508 - 84° 28' 39.03"
Universal Tranverse Mercator:	Zone 16
UTM X (Meters):	733452.8
UTM Y (Meters):	3745608.5
Elevation:	841 ft. above sea level

USGS TOPOGRAPHIC MAP

Target Property Map:	33084-G4 NORTHWEST ATLANTA, GA
Version Date:	1997

EDR's GeoCheck Physical Setting Source Addendum is provided to assist the environmental professional in forming an opinion about the impact of potential contaminant migration.

Assessment of the impact of contaminant migration generally has two principle investigative components:

1. Groundwater flow direction, and
2. Groundwater flow velocity.

Groundwater flow direction may be impacted by surface topography, hydrology, hydrogeology, characteristics of the soil, and nearby wells. Groundwater flow velocity is generally impacted by the nature of the geologic strata.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW DIRECTION INFORMATION

Groundwater flow direction for a particular site is best determined by a qualified environmental professional using site-specific well data. If such data is not reasonably ascertainable, it may be necessary to rely on other sources of information, such as surface topographic information, hydrologic information, hydrogeologic data collected on nearby properties, and regional groundwater flow information (from deep aquifers).

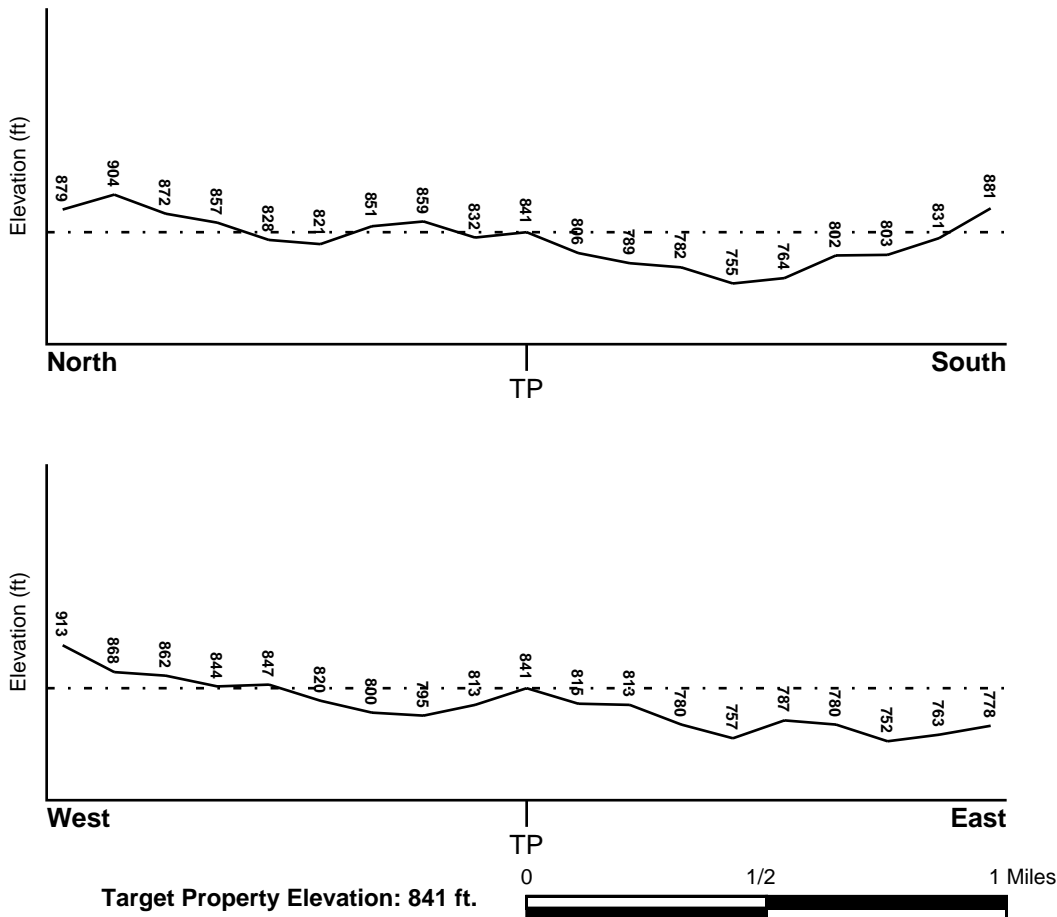
TOPOGRAPHIC INFORMATION

Surface topography may be indicative of the direction of surficial groundwater flow. This information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

TARGET PROPERTY TOPOGRAPHY

General Topographic Gradient: General SSW

SURROUNDING TOPOGRAPHY: ELEVATION PROFILES



Source: Topography has been determined from the USGS 7.5' Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

HYDROLOGIC INFORMATION

Surface water can act as a hydrologic barrier to groundwater flow. Such hydrologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Refer to the Physical Setting Source Map following this summary for hydrologic information (major waterways and bodies of water).

FEMA FLOOD ZONE

<u>Flood Plain Panel at Target Property</u>	<u>FEMA Source Type</u>
13067C0228H	FEMA FIRM Flood data
<u>Additional Panels in search area:</u>	<u>FEMA Source Type</u>
13067C0229H	FEMA FIRM Flood data
13067C0236H	FEMA FIRM Flood data

NATIONAL WETLAND INVENTORY

<u>NWI Quad at Target Property</u>	<u>NWI Electronic</u>
NORTHWEST ATLANTA	<u>Data Coverage</u>
	YES - refer to the Overview Map and Detail Map

HYDROGEOLOGIC INFORMATION

Hydrogeologic information obtained by installation of wells on a specific site can often be an indicator of groundwater flow direction in the immediate area. Such hydrogeologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

AQUIFLOW®

Search Radius: 1.000 Mile.

EDR has developed the AQUIFLOW Information System to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted by environmental professionals to regulatory authorities at select sites and has extracted the date of the report, groundwater flow direction as determined hydrogeologically, and the depth to water table.

<u>MAP ID</u>	<u>LOCATION FROM TP</u>	<u>GENERAL DIRECTION GROUNDWATER FLOW</u>
1	1/2 - 1 Mile SSW	SSW

For additional site information, refer to Physical Setting Source Map Findings.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW VELOCITY INFORMATION

Groundwater flow velocity information for a particular site is best determined by a qualified environmental professional using site specific geologic and soil strata data. If such data are not reasonably ascertainable, it may be necessary to rely on other sources of information, including geologic age identification, rock stratigraphic unit and soil characteristics data collected on nearby properties and regional soil information. In general, contaminant plumes move more quickly through sandy-gravelly types of soils than silty-clayey types of soils.

GEOLOGIC INFORMATION IN GENERAL AREA OF TARGET PROPERTY

Geologic information can be used by the environmental professional in forming an opinion about the relative speed at which contaminant migration may be occurring.

ROCK STRATIGRAPHIC UNIT

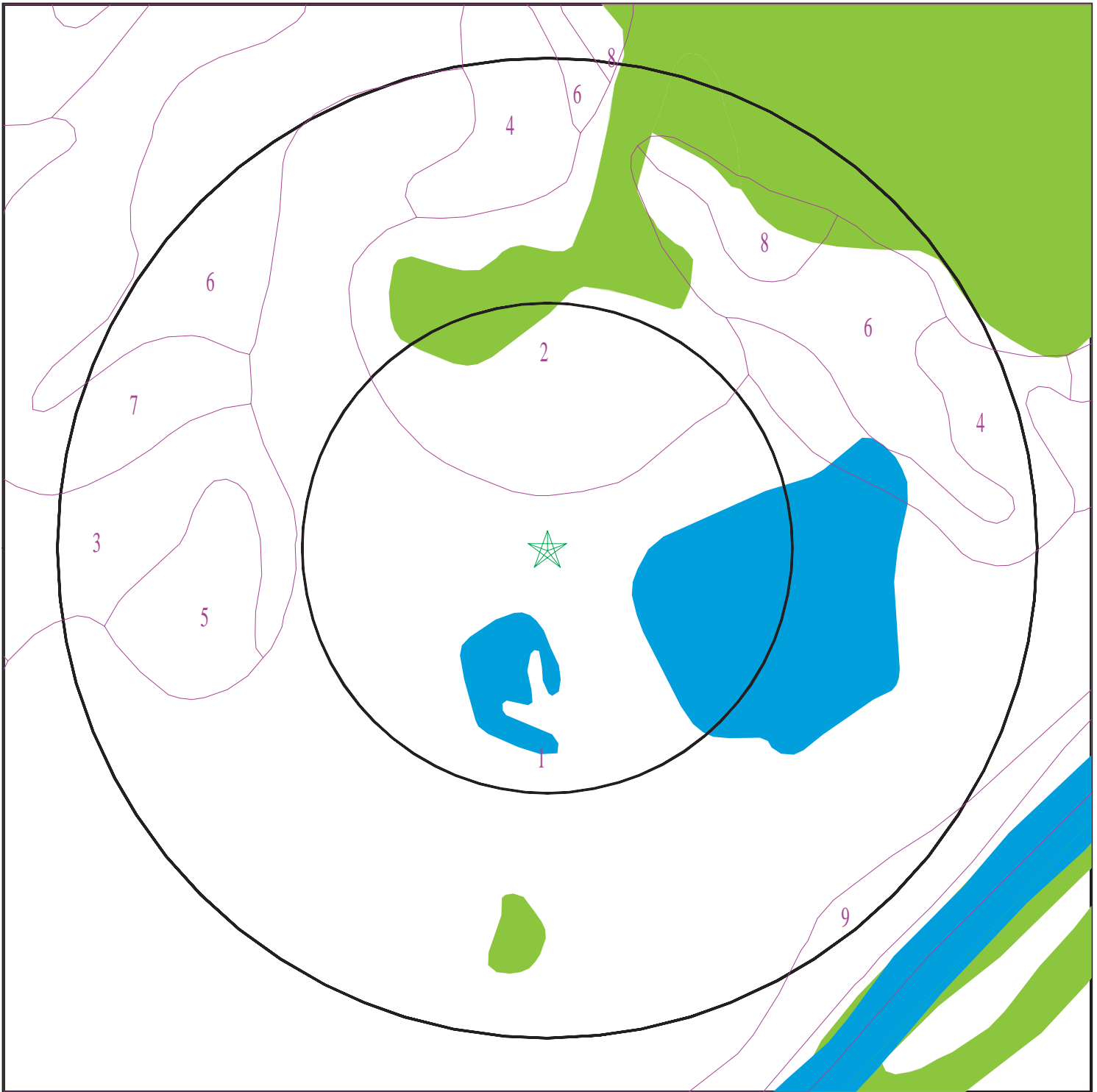
Era:	Paleozoic
System:	Pennsylvanian
Series:	Cataclastic rocks
Code:	cat (decoded above as Era, System & Series)

GEOLOGIC AGE IDENTIFICATION

Category: Metamorphic Rocks

Geologic Age and Rock Stratigraphic Unit Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - a digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

SSURGO SOIL MAP - 6754839.7s



- ★ Target Property
- ∩ SSURGO Soil
- ∩ Water



SITE NAME: Plant McDonough
ADDRESS: 5551 S Cobb Drive
Atlanta GA 30339
LAT/LONG: 33.826695 / 84.477508

CLIENT: Golder Associates, Inc.
CONTACT: Jude Waguespack
INQUIRY #: 6754839.7s
DATE: November 17, 2021 6:48 pm

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

DOMINANT SOIL COMPOSITION IN GENERAL AREA OF TARGET PROPERTY

The U.S. Department of Agriculture's (USDA) Soil Conservation Service (SCS) leads the National Cooperative Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. The following information is based on Soil Conservation Service SSURGO data.

Soil Map ID: 1

Soil Component Name: Urban land

Soil Surface Texture:
Hydrologic Group: Not reported

Soil Drainage Class:
Hydric Status: Unknown

Corrosion Potential - Uncoated Steel: Not Reported

Depth to Bedrock Min: > 200 inches

Depth to Watertable Min: > 0 inches

No Layer Information available.

Soil Map ID: 2

Soil Component Name: Water

Soil Surface Texture:
Hydrologic Group: Not reported

Soil Drainage Class:
Hydric Status: Unknown

Corrosion Potential - Uncoated Steel: Not Reported

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

No Layer Information available.

Soil Map ID: 3

Soil Component Name: Madison

Soil Surface Texture: sandy clay loam

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class: Well drained

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
Layer	Boundary		Soil Texture Class	Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
	Upper	Lower		AASHTO Group	Unified Soil		
1	29 inches	35 inches	sandy clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 14 Min: 4	Max: 6 Min: 4.5
2	0 inches	5 inches	sandy loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 14 Min: 4	Max: 6 Min: 4.5
3	5 inches	29 inches	clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 14 Min: 4	Max: 6 Min: 4.5
4	35 inches	66 inches	sandy loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 14 Min: 4	Max: 6 Min: 4.5

Soil Map ID: 4

Soil Component Name: Madison

Soil Surface Texture: sandy clay loam

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class: Well drained

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
Layer	Boundary		Soil Texture Class	Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
	Upper	Lower		AASHTO Group	Unified Soil		
1	0 inches	5 inches	sandy clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 14 Min: 4	Max: 6 Min: 4.5
2	5 inches	29 inches	clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 14 Min: 4	Max: 6 Min: 4.5
3	29 inches	35 inches	clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 14 Min: 4	Max: 6 Min: 4.5
4	35 inches	66 inches	loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 14 Min: 4	Max: 6 Min: 4.5

Soil Map ID: 5

Soil Component Name: Madison

Soil Surface Texture: sandy clay loam

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class: Well drained

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
Layer	Boundary		Soil Texture Class	Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
	Upper	Lower		AASHTO Group	Unified Soil		
1	29 inches	35 inches	sandy clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 14 Min: 4	Max: 6 Min: 4.5
2	0 inches	5 inches	sandy loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 14 Min: 4	Max: 6 Min: 4.5
3	5 inches	29 inches	clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 14 Min: 4	Max: 6 Min: 4.5
4	35 inches	66 inches	sandy loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 14 Min: 4	Max: 6 Min: 4.5

Soil Map ID: 6

Soil Component Name: Madison

Soil Surface Texture: clay loam

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class: Well drained

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
Layer	Boundary		Soil Texture Class	Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
	Upper	Lower		AASHTO Group	Unified Soil		
1	0 inches	5 inches	clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 14 Min: 4	Max: 6 Min: 4.5
2	5 inches	29 inches	clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 14 Min: 4	Max: 6 Min: 4.5
3	29 inches	35 inches	sandy clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 14 Min: 4	Max: 6 Min: 4.5
4	35 inches	66 inches	sandy loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 14 Min: 4	Max: 6 Min: 4.5

Soil Map ID: 7

Soil Component Name: Madison

Soil Surface Texture: sandy loam

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class: Well drained

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
Layer	Boundary		Soil Texture Class	Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
	Upper	Lower		AASHTO Group	Unified Soil		
1	0 inches	5 inches	sandy loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 14 Min: 4	Max: 6 Min: 4.5
2	5 inches	29 inches	clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 14 Min: 4	Max: 6 Min: 4.5
3	29 inches	35 inches	clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 14 Min: 4	Max: 6 Min: 4.5
4	35 inches	66 inches	sandy loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 14 Min: 4	Max: 6 Min: 4.5

Soil Map ID: 8

Soil Component Name: Madison

Soil Surface Texture: sandy clay loam

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class: Well drained

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
Layer	Boundary		Soil Texture Class	Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
	Upper	Lower		AASHTO Group	Unified Soil		
1	29 inches	35 inches	sandy clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 14 Min: 4	Max: 6 Min: 4.5
2	0 inches	5 inches	sandy loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 14 Min: 4	Max: 6 Min: 4.5
3	5 inches	29 inches	clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 14 Min: 4	Max: 6 Min: 4.5
4	35 inches	66 inches	sandy loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 14 Min: 4	Max: 6 Min: 4.5

Soil Map ID: 9

Soil Component Name: Toccoa

Soil Surface Texture: sandy loam

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class: Moderately well drained

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Low

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 114 inches

Soil Layer Information							
Layer	Boundary		Soil Texture Class	Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
	Upper	Lower		AASHTO Group	Unified Soil		
1	0 inches	9 inches	sandy loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 42 Min: 14	Max: 6.5 Min: 5.1
2	9 inches	59 inches	sandy loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 42 Min: 14	Max: 6.5 Min: 5.1

LOCAL / REGIONAL WATER AGENCY RECORDS

EDR Local/Regional Water Agency records provide water well information to assist the environmental professional in assessing sources that may impact ground water flow direction, and in forming an opinion about the impact of contaminant migration on nearby drinking water wells.

WELL SEARCH DISTANCE INFORMATION

<u>DATABASE</u>	<u>SEARCH DISTANCE (miles)</u>
Federal USGS	2.000
Federal FRDS PWS	2.000
State Database	2.000

FEDERAL USGS WELL INFORMATION

<u>MAP ID</u>	<u>WELL ID</u>	<u>LOCATION FROM TP</u>
A2	USGS40000265121	1/2 - 1 Mile NNE
B4	USGS40000265094	1/2 - 1 Mile East
B7	USGS40000265087	1/2 - 1 Mile ESE
B9	USGS40000265091	1/2 - 1 Mile East

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

FEDERAL USGS WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
D20	USGS40000265168	1 - 2 Miles NNW
E21	USGS40000265154	1 - 2 Miles NE
F24	USGS40000265164	1 - 2 Miles NW
25	USGS40000265145	1 - 2 Miles WNW

FEDERAL FRDS PUBLIC WATER SUPPLY SYSTEM INFORMATION

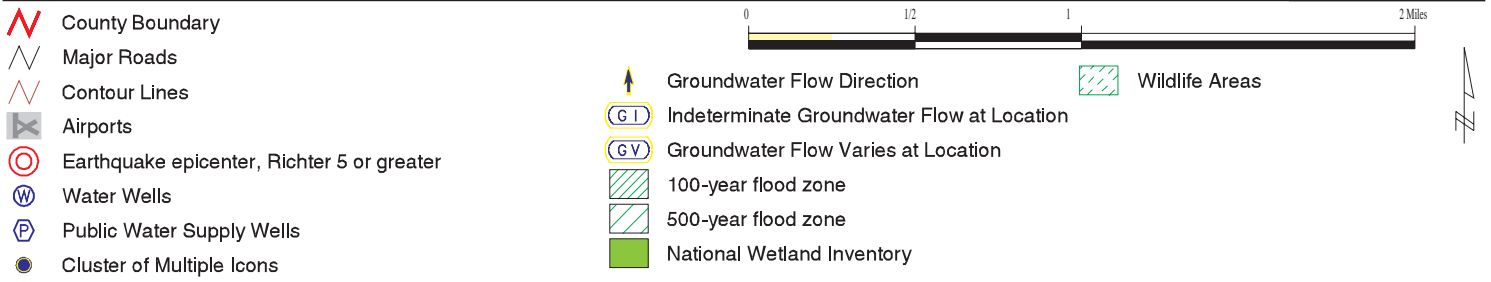
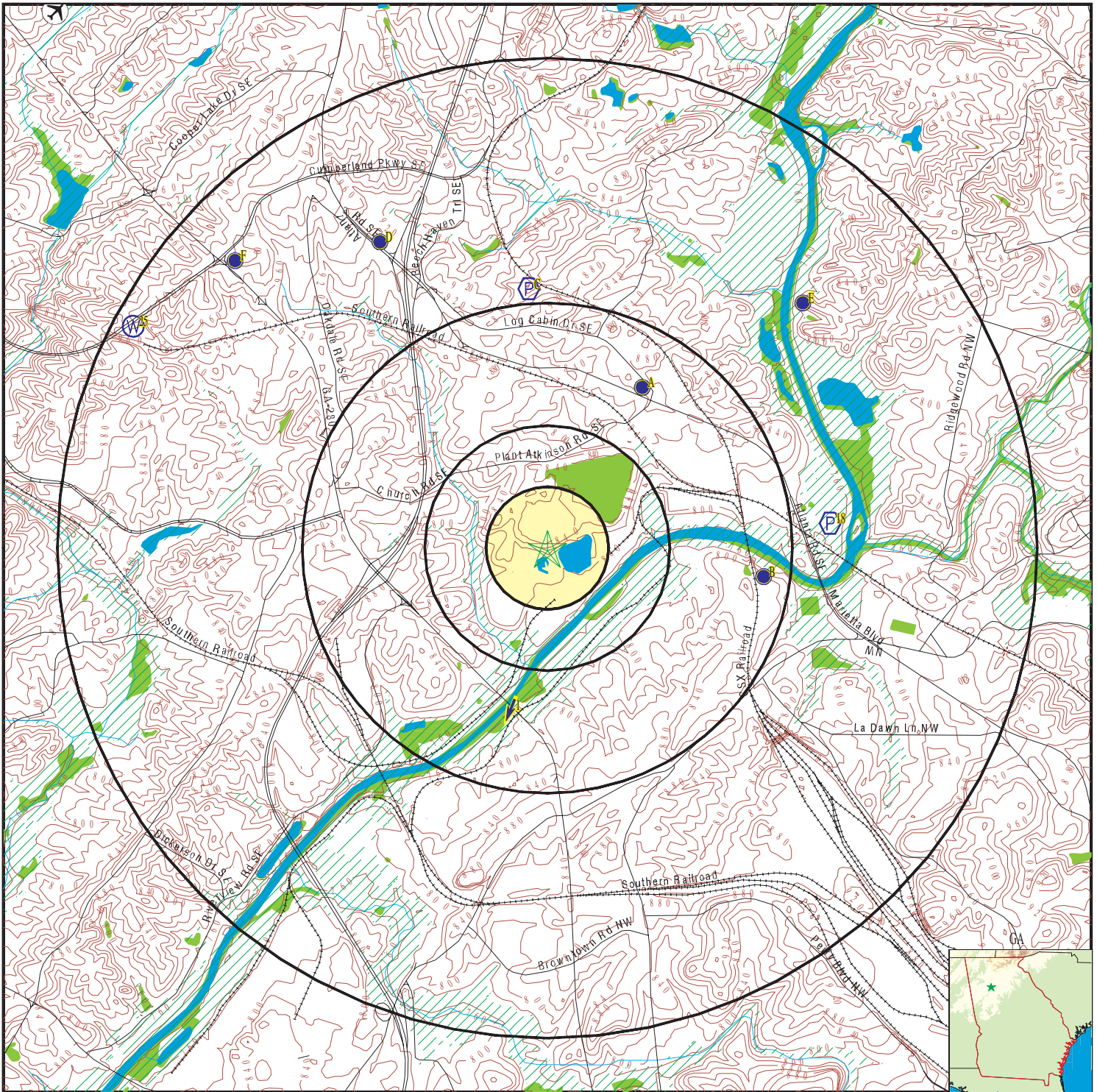
MAP ID	WELL ID	LOCATION FROM TP
C10	GA1210038	1 - 2 Miles North
C11	GA1210000	1 - 2 Miles North
C12	GA1210006	1 - 2 Miles North
C13	GA1210037	1 - 2 Miles North
C14	GA1210002	1 - 2 Miles North
C15	GA1210039	1 - 2 Miles North
C16	GA1210007	1 - 2 Miles North
C17	GA1210005	1 - 2 Miles North
18	GA1210001	1 - 2 Miles East

Note: PWS System location is not always the same as well location.

STATE DATABASE WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
A3	0000002231	1/2 - 1 Mile NNE
B5	0000004659	1/2 - 1 Mile East
B6	0000004656	1/2 - 1 Mile ESE
B8	0000004658	1/2 - 1 Mile East
D19	0000002233	1 - 2 Miles NNW
E22	0000004660	1 - 2 Miles NE
F23	0000002232	1 - 2 Miles NW

PHYSICAL SETTING SOURCE MAP - 6754839.7s



<p>SITE NAME: Plant McDonough ADDRESS: 5551 S Cobb Drive Atlanta GA 30339 LAT/LONG: 33.826695 / 84.477508</p>	<p>CLIENT: Golder Associates, Inc. CONTACT: Jude Waguespack INQUIRY #: 6754839.7s DATE: November 17, 2021 6:48 pm</p>
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GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
 Direction
 Distance
 Elevation

Database EDR ID Number

1
SSW
1/2 - 1 Mile
Lower

Site ID: 0-601138
 Groundwater Flow: SSW
 Shallow Water Depth: 18.82
 Deep Water Depth: 19.04
 Average Water Depth: Not Reported
 Date: 07/1991

AQUIFLOW 18783

A2
NNE
1/2 - 1 Mile
Higher

FED USGS USGS40000265121

Organization ID:	USGS-GA	Organization Name:	USGS Georgia Water Science Center
Monitor Location:	10EE02	Type:	Well
Description:	W.C. HALL	HUC:	03130002
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Units:	Not Reported
Aquifer:	Piedmont and Blue Ridge crystalline-rock aquifers		
Formation Type:	Crystalline Rocks	Aquifer Type:	Confined multiple aquifer
Construction Date:	1932	Well Depth:	79
Well Depth Units:	ft	Well Hole Depth:	79
Well Hole Depth Units:	ft		

Ground water levels,Number of Measurements:	49	Level reading date:	1992-06-16
Feet below surface:	29.34	Feet to sea level:	Not Reported
Note:	Not Reported		
Level reading date:	1991-10-31	Feet below surface:	29.25
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1991-05-23	Feet below surface:	30.74
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1990-10-29	Feet below surface:	31.71
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1990-05-30	Feet below surface:	29.21
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1989-10-27	Feet below surface:	32.50
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1988-11-28	Feet below surface:	34.10
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1988-06-29	Feet below surface:	33.15
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1987-10-26	Feet below surface:	32.99
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1986-11-26	Feet below surface:	32.68
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1986-07-28	Feet below surface:	32.00
Feet to sea level:	Not Reported	Note:	Not Reported

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Level reading date:	1985-05-31	Feet below surface:	34.34
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1984-05-31	Feet below surface:	26.94
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1983-11-01	Feet below surface:	30.92
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1983-05-31	Feet below surface:	29.60
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1982-10-26	Feet below surface:	32.40
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1982-05-25	Feet below surface:	31.89
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1981-10-22	Feet below surface:	32.63
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1981-05-21	Feet below surface:	31.09
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1980-11-13	Feet below surface:	30.18
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1980-05-29	Feet below surface:	27.89
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1979-10-25	Feet below surface:	30.81
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1979-05-23	Feet below surface:	31.09
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1978-12-07	Feet below surface:	32.31
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1978-10-18	Feet below surface:	31.81
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1978-05-25	Feet below surface:	29.87
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1978-04-21	Feet below surface:	30.19
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1978-03-31	Feet below surface:	30.37
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1978-03-01	Feet below surface:	30.77
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1978-01-30	Feet below surface:	31.28
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1977-12-28	Feet below surface:	31.52
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1977-12-01	Feet below surface:	31.40
Feet to sea level:	Not Reported	Note:	Not Reported

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Level reading date:	1977-10-27	Feet below surface:	31.33
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1977-09-30	Feet below surface:	31.11
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1977-08-25	Feet below surface:	30.78
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1977-07-27	Feet below surface:	30.36
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1977-06-28	Feet below surface:	29.72
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1977-05-26	Feet below surface:	29.18
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1977-05-02	Feet below surface:	29.45
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1977-03-28	Feet below surface:	30.20
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1977-02-23	Feet below surface:	30.32
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1977-01-26	Feet below surface:	30.19
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1976-12-21	Feet below surface:	32.74
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1976-10-14	Feet below surface:	29.20
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1976-06-03	Feet below surface:	26.68
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1975-11-14	Feet below surface:	28.43
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1974-10-18	Feet below surface:	29.50
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1974-05-15	Feet below surface:	26.50
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1943-03-24	Feet below surface:	34
Feet to sea level:	Not Reported	Note:	Not Reported

**A3
NNE
1/2 - 1 Mile
Higher**

GA WELLS 000002231

County code:	067	Well num:	10EE02
Remarks:	W.C. HALL	Lat:	335010
Lon:	0842815	Latlon datum:	NAD27
Alt:	858.00	Alt datum:	NGVD29
Depth:	79	Depth to casing:	40

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Casing dia:	6	Casing matl:	Not Reported
Depth to top:	40	Depth to bot:	85
Opening type:	X	Constr date:	1932
Discharge:	Not Reported	Prim use:	U
Aquifer code:	320CRSL	Edr id:	000002231

B4
East
1/2 - 1 Mile
Lower

FED USGS USGS40000265094

Organization ID:	USGS-GA	Organization Name:	USGS Georgia Water Science Center
Monitor Location:	10EE26	Type:	Well
Description:	SONOCO PRODUCTS	HUC:	03130002
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Not Reported	Formation Type:	Not Reported
Aquifer Type:	Not Reported	Construction Date:	19660301
Well Depth:	500	Well Depth Units:	ft
Well Hole Depth:	500	Well Hole Depth Units:	ft

B5
East
1/2 - 1 Mile
Lower

GA WELLS 000004659

County code:	121	Well num:	10EE26
Remarks:	SONOCO PRODUCTS	Lat:	334933
Lon:	0842745	Latlon datum:	NAD27
Alt:	900.00	Alt datum:	NGVD29
Depth:	500	Depth to casing:	23.00
Casing dia:	8.00	Casing matl:	S
Depth to top:	23.00	Depth to bot:	500.00
Opening type:	X	Constr date:	196603
Discharge:	30.00	Prim use:	C
Aquifer code:	Not Reported	Edr id:	000004659

B6
ESE
1/2 - 1 Mile
Lower

GA WELLS 000004656

County code:	121	Well num:	10EE27
Remarks:	SONOCO PRODUCTS	Lat:	334926
Lon:	0842745	Latlon datum:	NAD27
Alt:	900.00	Alt datum:	NGVD29
Depth:	500	Depth to casing:	23.00
Casing dia:	Not Reported	Casing matl:	S
Depth to top:	23.00	Depth to bot:	500.00
Opening type:	X	Constr date:	196604
Discharge:	32.00	Prim use:	C
Aquifer code:	Not Reported	Edr id:	000004656

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation

Database EDR ID Number

B7
ESE
1/2 - 1 Mile
Lower

FED USGS USGS40000265087

Organization ID:	USGS-GA	Organization Name:	USGS Georgia Water Science Center
Monitor Location:	10EE27	Type:	Well
Description:	SONOCO PRODUCTS	HUC:	03130002
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Not Reported	Formation Type:	Not Reported
Aquifer Type:	Not Reported	Construction Date:	19660401
Well Depth:	500	Well Depth Units:	ft
Well Hole Depth:	500	Well Hole Depth Units:	ft

B8
East
1/2 - 1 Mile
Lower

GA WELLS 0000004658

County code:	121	Well num:	10EE25
Remarks:	SONOCO PRODUCTS	Lat:	334930
Lon:	0842742	Latlon datum:	NAD27
Alt:	900.00	Alt datum:	NGVD29
Depth:	400	Depth to casing:	33.00
Casing dia:	10.00	Casing matl:	S
Depth to top:	33.00	Depth to bot:	400.00
Opening type:	X	Constr date:	195801
Discharge:	144.00	Prim use:	C
Aquifer code:	Not Reported	Edr id:	0000004658

B9
East
1/2 - 1 Mile
Lower

FED USGS USGS40000265091

Organization ID:	USGS-GA	Organization Name:	USGS Georgia Water Science Center
Monitor Location:	10EE25	Type:	Well
Description:	SONOCO PRODUCTS	HUC:	03130002
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Not Reported	Formation Type:	Not Reported
Aquifer Type:	Not Reported	Construction Date:	19580101
Well Depth:	400	Well Depth Units:	ft
Well Hole Depth:	400	Well Hole Depth Units:	ft

C10
North
1 - 2 Miles
Higher

FRDS PWS GA1210038

Epa region:	04	State:	GA
Pwsid:	GA1210038		
Pwsname:	ATLANTA-FULTON CO WATER RES COMMISSION		
Cityserved:	Not Reported	Stateserved:	GA

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Zipsserved:	Not Reported	Fipscounty:	13121
Status:	Active	Retpopsrvd:	0
Pwssvconn:	2	Psource longname:	Surface_water
Pwstype:	CWS	Owner:	Local_Govt
Contact:	CREWS, KATHY	Contactorgname:	CREWS, KATHY
Contactphone:	678-942-2791	Contactaddress1:	9750 SPRUILL RD.
Contactaddress2:	Not Reported	Contactcity:	ALPHARETTA
Contactstate:	GA	Contactzip:	30022
Pwsactivitycode:	A		
Pwsid:	GA1210038	Facid:	1034
Facname:	ATLANTA-FULTON CO WATER PLANT		
Factype:	Treatment_plant	Facactivitycode:	A
Trtobjective:	disinfection	Trtprocess:	gaseous chlorination, post
Factypecode:	TP		
Pwsid:	GA1210038	Facid:	1034
Facname:	ATLANTA-FULTON CO WATER PLANT		
Factype:	Treatment_plant	Facactivitycode:	A
Trtobjective:	corrosion control	Trtprocess:	ph adjustment, post
Factypecode:	TP		
Pwsid:	GA1210038	Facid:	1034
Facname:	ATLANTA-FULTON CO WATER PLANT		
Factype:	Treatment_plant	Facactivitycode:	A
Trtobjective:	particulate removal	Trtprocess:	filtration, rapid sand
Factypecode:	TP		
Pwsid:	GA1210038	Facid:	1034
Facname:	ATLANTA-FULTON CO WATER PLANT		
Factype:	Treatment_plant	Facactivitycode:	A
Trtobjective:	disinfection	Trtprocess:	gaseous chlorination, pre
Factypecode:	TP		
Pwsid:	GA1210038	Facid:	1034
Facname:	ATLANTA-FULTON CO WATER PLANT		
Factype:	Treatment_plant	Facactivitycode:	A
Trtobjective:	particulate removal	Trtprocess:	ph adjustment, pre
Factypecode:	TP		
Pwsid:	GA1210038	Facid:	1034
Facname:	ATLANTA-FULTON CO WATER PLANT		
Factype:	Treatment_plant	Facactivitycode:	A
Trtobjective:	particulate removal	Trtprocess:	rapid mix
Factypecode:	TP		
Pwsid:	GA1210038	Facid:	1034
Facname:	ATLANTA-FULTON CO WATER PLANT		
Factype:	Treatment_plant	Facactivitycode:	A
Trtobjective:	particulate removal	Trtprocess:	coagulation
Factypecode:	TP		
Pwsid:	GA1210038	Facid:	1034
Facname:	ATLANTA-FULTON CO WATER PLANT		
Factype:	Treatment_plant	Facactivitycode:	A
Trtobjective:	particulate removal	Trtprocess:	flocculation
Factypecode:	TP		
Pwsid:	GA1210038	Facid:	1034
Facname:	ATLANTA-FULTON CO WATER PLANT		
Factype:	Treatment_plant	Facactivitycode:	A
Trtobjective:	particulate removal	Trtprocess:	sedimentation

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Factypecode:	TP		
PWS ID:	GA1210038	PWS name:	ATLANTA-FULTON WATER RES COMM
Address:	9750 SPRUILL ROAD	Care of:	FULTON CO. WATER RESOURCES CM
City:	ALPHARETTA	State:	GA
Zip:	30022	Owner:	ATLANTA-FULTON WATER RES COMM
Source code:	Surface water	Population:	25
PWS ID:	GA1210038	PWS type:	Not Reported
PWS name:	Not Reported	PWS address:	Not Reported
PWS city:	Not Reported	PWS state:	Not Reported
PWS zip:	Not Reported	County:	FULTON
Source:	Surface water	Treatment Objective:	DISINFECTION
Process:	GASEOUS CHLORINATION, POST		
Population:	0		
PWS ID:	GA1210038	Activity status:	Active
Date system activated:	Not Reported	Date system deactivated:	Not Reported
Retail population:	00000025	System name:	ATLANTA-FULTON WATER RES COMM
System address:	ATLANTA-FULTON WATER RES COMM	System city:	ALPHARETTA
System address:	9750 SPRUILL ROAD	System zip:	30201
System state:	GA		
Population served:	Under 101 Persons	Treatment:	Treated
Latitude:	340431	Longitude:	0841739
Latitude:	335031	Longitude:	0842844
State:	GA	Latitude degrees:	33
Latitude minutes:	50	Latitude seconds:	31.0000
Longitude degrees:	84	Longitude minutes:	28
Longitude seconds:	44.0000		

**C11
North
1 - 2 Miles
Higher**

FRDS PWS GA1210000

Epa region:	04	State:	GA
Pwsid:	GA1210000	Pwsname:	ALPHARETTA
Cityserved:	Not Reported	Stateserved:	GA
Zipsserved:	Not Reported	Fipscounty:	13121
Status:	Closed	Retpopsrvd:	11700
Pwssvconn:	3392	Psource longname:	Purch_surface_water
Pwstype:	CWS	Owner:	Local_Govt
Contact:	CHATHAM, EARL	Contactorgname:	Not Reported
Contactphone:	678-297-6200	Contactaddress1:	1790 HEMBREE ROAD
Contactaddress2:	Not Reported	Contactcity:	ALPHARETTA
Contactstate:	GA	Contactzip:	30004
Pwsactivitycode:	I		
PWS ID:	GA1210000	PWS name:	ALPHARETTA
Address:	1790 HEMBREE ROAD	Care of:	CITY OF ALPHARETTA
City:	ALPHARETTA	State:	GA
Zip:	30004	Owner:	ALPHARETTA
Source code:	Purchases surface water	Population:	8060
PWS ID:	GA1210000	PWS type:	Not Reported
PWS name:	Not Reported	PWS address:	Not Reported
PWS city:	Not Reported	PWS state:	Not Reported

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

PWS zip:	Not Reported	PWS ID:	GA1210000
Activity status:	Active	Date system activated:	Not Reported
Date system deactivated:	Not Reported	Retail population:	00006539
System name:	ALPHARETTA	System address:	CITY OF ALPHARETTA
System address:	TWO SOUTH MAIN STREET	System city:	ALPHARETTA
System state:	GA	System zip:	30201
Population served:	5,001 - 10,000 Persons	Treatment:	Treated
Latitude:	335031	Longitude:	0842844
Violation id:	10098	Orig code:	S
State:	GA	Violation Year:	1995
Contamination code:	5000	Contamination Name:	Lead and Copper Rule
Violation code:	52	Violation name:	Follow-up Or Routine LCR Tap M/R
Rule code:	350	Rule name:	LCR
Violation measur:	Not Reported	Unit of measure:	Not Reported
State mcl:	Not Reported	Cmp bdt:	10/01/1995
Cmp edt:	Not Reported		
Violation id:	20303	Orig code:	S
State:	GA	Violation Year:	2003
Contamination code:	3100	Contamination Name:	Coliform (TCR)
Violation code:	24	Violation name:	Monitoring, Routine Minor (TCR)
Rule code:	110	Rule name:	TCR
Violation measur:	Not Reported	Unit of measure:	Not Reported
State mcl:	Not Reported	Cmp bdt:	04/01/2003
Cmp edt:	04/30/2003		
Violation id:	20404	Orig code:	S
State:	GA	Violation Year:	1998
Contamination code:	5000	Contamination Name:	Lead and Copper Rule
Violation code:	52	Violation name:	Follow-up Or Routine LCR Tap M/R
Rule code:	350	Rule name:	LCR
Violation measur:	Not Reported	Unit of measure:	Not Reported
State mcl:	Not Reported	Cmp bdt:	10/01/1998
Cmp edt:	Not Reported		
Violation id:	20505	Orig code:	S
State:	GA	Violation Year:	2004
Contamination code:	3100	Contamination Name:	Coliform (TCR)
Violation code:	23	Violation name:	Monitoring, Routine Major (TCR)
Rule code:	110	Rule name:	TCR
Violation measur:	Not Reported	Unit of measure:	Not Reported
State mcl:	Not Reported	Cmp bdt:	10/01/2004
Cmp edt:	10/31/2004		
Violation id:	20605	Orig code:	S
State:	GA	Violation Year:	2004
Contamination code:	3100	Contamination Name:	Coliform (TCR)
Violation code:	23	Violation name:	Monitoring, Routine Major (TCR)
Rule code:	110	Rule name:	TCR
Violation measur:	Not Reported	Unit of measure:	Not Reported
State mcl:	Not Reported	Cmp bdt:	11/01/2004
Cmp edt:	11/30/2004		
Violation id:	20705	Orig code:	S
State:	GA	Violation Year:	2004
Contamination code:	5000	Contamination Name:	Lead and Copper Rule
Violation code:	52	Violation name:	Follow-up Or Routine LCR Tap M/R
Rule code:	350	Rule name:	LCR
Violation measur:	Not Reported	Unit of measure:	Not Reported

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

State mcl:	Not Reported	Cmp bdt:	10/01/2004
Cmp edt:	Not Reported		
Violation id:	20805	Orig code:	S
State:	GA	Violation Year:	2005
Contamination code:	7000	Contamination Name:	Consumer Confidence Rule
Violation code:	71	Violation name:	CCR Complete Failure to Report
Rule code:	420	Rule name:	CCR
Violation measur:	Not Reported	Unit of measure:	Not Reported
State mcl:	Not Reported	Cmp bdt:	07/01/2005
Cmp edt:	Not Reported		
Violation ID:	20303	Orig Code:	S
Enforcemnt FY:	2003	Enforcement Action:	05/29/2003
Enforcement Detail:	St Public Notif requested	Enforcement Category:	Informal
Violation ID:	20303	Orig Code:	S
Enforcemnt FY:	2003	Enforcement Action:	05/29/2003
Enforcement Detail:	St Violation/Reminder Notice		
Enforcement Category:	Informal		
Violation ID:	20404	Orig Code:	S
Enforcemnt FY:	2002	Enforcement Action:	02/03/2002
Enforcement Detail:	St Violation/Reminder Notice		
Enforcement Category:	Informal		
Violation ID:	20404	Orig Code:	S
Enforcemnt FY:	2004	Enforcement Action:	06/28/2004
Enforcement Detail:	St Public Notif received	Enforcement Category:	Informal
Violation ID:	20404	Orig Code:	S
Enforcemnt FY:	2002	Enforcement Action:	09/25/2002
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	20505	Orig Code:	S
Enforcemnt FY:	2005	Enforcement Action:	12/03/2004
Enforcement Detail:	St Violation/Reminder Notice		
Enforcement Category:	Informal		
Violation ID:	20505	Orig Code:	S
Enforcemnt FY:	2005	Enforcement Action:	01/25/2005
Enforcement Detail:	St Public Notif received	Enforcement Category:	Informal
Violation ID:	20505	Orig Code:	S
Enforcemnt FY:	2005	Enforcement Action:	12/03/2004
Enforcement Detail:	St Public Notif requested	Enforcement Category:	Informal
Violation ID:	20605	Orig Code:	S
Enforcemnt FY:	2005	Enforcement Action:	12/07/2004
Enforcement Detail:	St Public Notif requested	Enforcement Category:	Informal
Violation ID:	20605	Orig Code:	S
Enforcemnt FY:	2005	Enforcement Action:	12/07/2004
Enforcement Detail:	St Violation/Reminder Notice		
Enforcement Category:	Informal		
Violation ID:	20605	Orig Code:	S
Enforcemnt FY:	2005	Enforcement Action:	01/25/2005
Enforcement Detail:	St Public Notif received	Enforcement Category:	Informal
Violation ID:	20705	Orig Code:	S
Enforcemnt FY:	2005	Enforcement Action:	05/05/2005

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Enforcement Detail:	St Public Notif received	Enforcement Category:	Informal
Violation ID:	20705	Orig Code:	S
Enforcemnt FY:	2005	Enforcement Action:	01/27/2005
Enforcement Detail:	St Violation/Reminder Notice		
Enforcement Category:	Informal		
Violation ID:	20705	Orig Code:	S
Enforcemnt FY:	2005	Enforcement Action:	05/26/2005
Enforcement Detail:	St Other	Enforcement Category:	Informal
Violation ID:	20705	Orig Code:	S
Enforcemnt FY:	2005	Enforcement Action:	01/27/2005
Enforcement Detail:	St Public Notif requested	Enforcement Category:	Informal
Violation ID:	20805	Orig Code:	S
Enforcemnt FY:	2005	Enforcement Action:	08/24/2005
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	20805	Orig Code:	S
Enforcemnt FY:	2005	Enforcement Action:	07/01/2005
Enforcement Detail:	St Intentional no-action	Enforcement Category:	Resolving

**C12
North
1 - 2 Miles
Higher**

FRDS PWS GA1210006

Epa region:	04	State:	GA
Pwsid:	GA1210006	Pwsname:	HAPEVILLE
Cityserved:	Not Reported	Stateserved:	GA
Zipsserved:	Not Reported	Fipscounty:	13121
Status:	Active	Retpopsrvd:	5385
Pwssvconn:	2071	Psource longname:	Purch_surface_water
Pwstype:	CWS	Owner:	Local_Govt
Contact:	MARTIN, C C	Contactorgname:	MARTIN, C C
Contactphone:	404-669-2100	Contactaddress1:	POB 82311
Contactaddress2:	Not Reported	Contactcity:	HAPEVILLE
Contactstate:	GA	Contactzip:	30354-2311
Pwsactivitycode:	A		
PWS ID:	GA1210006	PWS name:	HAPEVILLE
Address:	3560 PERKINS STREET	Care of:	CITY OF HAPEVILLE
City:	HAPEVILLE	State:	GA
Zip:	30354	Owner:	HAPEVILLE
Source code:	Purchases surface water	Population:	5385
PWS ID:	GA1210006	PWS type:	Not Reported
PWS name:	Not Reported	PWS address:	Not Reported
PWS city:	Not Reported	PWS state:	Not Reported
PWS zip:	Not Reported	PWS name:	HAPEVILLE
PWS type code:	C	Retail population served:	5385
Contact:	MARTIN, C C	Contact address:	POB 82311
Contact address:	HAPEVILLE	Contact city:	GA
Contact state:	30	Contact zip:	404-669-21
Contact telephone:	Not Reported		
PWS ID:	GA1210006	Activity status:	Active
Date system activated:	Not Reported	Date system deactivated:	Not Reported
Retail population:	00005483	System name:	HAPEVILLE
System address:	CITY OF HAPEVILLE	System address:	POB 82311

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

System city:	HAPEVILLE	System state:	GA
System zip:	303542311		
Population served:	5,001 - 10,000 Persons	Treatment:	Treated
Latitude:	335031	Longitude:	0842844
Violation id:	10101	Orig code:	S
State:	GA	Violation Year:	2000
Contamination code:	7000	Contamination Name:	Consumer Confidence Rule
Violation code:	71	Violation name:	CCR Complete Failure to Report
Rule code:	420	Rule name:	CCR
Violation measur:	Not Reported	Unit of measure:	Not Reported
State mcl:	Not Reported	Cmp bdt:	07/01/2000
Cmp edt:	Not Reported		
Violation id:	10402	Orig code:	S
State:	GA	Violation Year:	2001
Contamination code:	7000	Contamination Name:	Consumer Confidence Rule
Violation code:	71	Violation name:	CCR Complete Failure to Report
Rule code:	420	Rule name:	CCR
Violation measur:	Not Reported	Unit of measure:	Not Reported
State mcl:	Not Reported	Cmp bdt:	07/01/2001
Cmp edt:	Not Reported		
Violation id:	10603	Orig code:	S
State:	GA	Violation Year:	2002
Contamination code:	7000	Contamination Name:	Consumer Confidence Rule
Violation code:	71	Violation name:	CCR Complete Failure to Report
Rule code:	420	Rule name:	CCR
Violation measur:	Not Reported	Unit of measure:	Not Reported
State mcl:	Not Reported	Cmp bdt:	07/01/2002
Cmp edt:	Not Reported		
Violation id:	10704	Orig code:	S
State:	GA	Violation Year:	2003
Contamination code:	7000	Contamination Name:	Consumer Confidence Rule
Violation code:	71	Violation name:	CCR Complete Failure to Report
Rule code:	420	Rule name:	CCR
Violation measur:	Not Reported	Unit of measure:	Not Reported
State mcl:	Not Reported	Cmp bdt:	07/01/2003
Cmp edt:	Not Reported		
Violation id:	10805	Orig code:	S
State:	GA	Violation Year:	2004
Contamination code:	7000	Contamination Name:	Consumer Confidence Rule
Violation code:	71	Violation name:	CCR Complete Failure to Report
Rule code:	420	Rule name:	CCR
Violation measur:	Not Reported	Unit of measure:	Not Reported
State mcl:	Not Reported	Cmp bdt:	07/01/2004
Cmp edt:	Not Reported		
Violation id:	10907	Orig code:	S
State:	GA	Violation Year:	2006
Contamination code:	7000	Contamination Name:	Consumer Confidence Rule
Violation code:	71	Violation name:	CCR Complete Failure to Report
Rule code:	420	Rule name:	CCR
Violation measur:	Not Reported	Unit of measure:	Not Reported
State mcl:	Not Reported	Cmp bdt:	07/01/2006
Cmp edt:	Not Reported		
Violation id:	11008	Orig code:	S

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

State:	GA	Violation Year:	2007
Contamination code:	7000	Contamination Name:	Consumer Confidence Rule
Violation code:	71	Violation name:	CCR Complete Failure to Report
Rule code:	420	Rule name:	CCR
Violation measur:	Not Reported	Unit of measure:	Not Reported
State mcl:	Not Reported	Cmp bdt:	07/01/2007
Cmp edt:	Not Reported		
Violation id:	11209	Orig code:	S
State:	GA	Violation Year:	2009
Contamination code:	3100	Contamination Name:	Coliform (TCR)
Violation code:	22	Violation name:	MCL, Monthly (TCR)
Rule code:	110	Rule name:	TCR
Violation measur:	Not Reported	Unit of measure:	Not Reported
State mcl:	Not Reported	Cmp bdt:	05/01/2009
Cmp edt:	05/31/2009		
Violation id:	11612	Orig code:	S
State:	GA	Violation Year:	2011
Contamination code:	3100	Contamination Name:	Coliform (TCR)
Violation code:	22	Violation name:	MCL, Monthly (TCR)
Rule code:	110	Rule name:	TCR
Violation measur:	Not Reported	Unit of measure:	Not Reported
State mcl:	Not Reported	Cmp bdt:	11/01/2011
Cmp edt:	11/30/2011		
Violation id:	11613	Orig code:	S
State:	GA	Violation Year:	2012
Contamination code:	7000	Contamination Name:	Consumer Confidence Rule
Violation code:	71	Violation name:	CCR Complete Failure to Report
Rule code:	420	Rule name:	CCR
Violation measur:	Not Reported	Unit of measure:	Not Reported
State mcl:	Not Reported	Cmp bdt:	07/01/2012
Cmp edt:	Not Reported		
Violation ID:	10101	Orig Code:	S
Enforcemnt FY:	2001	Enforcement Action:	07/02/2001
Enforcement Detail:	St Intentional no-action	Enforcement Category:	Resolving
Violation ID:	10101	Orig Code:	S
Enforcemnt FY:	2001	Enforcement Action:	08/31/2001
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	10402	Orig Code:	S
Enforcemnt FY:	2002	Enforcement Action:	07/02/2002
Enforcement Detail:	St Violation/Reminder Notice		
Enforcement Category:	Informal		
Violation ID:	10402	Orig Code:	S
Enforcemnt FY:	2002	Enforcement Action:	07/18/2002
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	10603	Orig Code:	S
Enforcemnt FY:	2003	Enforcement Action:	08/11/2003
Enforcement Detail:	State CCR Follow-up Notice		
Enforcement Category:	Informal		
Violation ID:	10603	Orig Code:	S
Enforcemnt FY:	2003	Enforcement Action:	08/18/2003
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	10704	Orig Code:	S

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Enforcemnt FY:	2004	Enforcement Action:	07/07/2004
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	10704	Orig Code:	S
Enforcemnt FY:	2004	Enforcement Action:	07/01/2004
Enforcement Detail:	St Intentional no-action	Enforcement Category:	Resolving
Violation ID:	10805	Orig Code:	S
Enforcemnt FY:	2005	Enforcement Action:	08/09/2005
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	10805	Orig Code:	S
Enforcemnt FY:	2005	Enforcement Action:	07/01/2005
Enforcement Detail:	St Intentional no-action	Enforcement Category:	Resolving
Violation ID:	10805	Orig Code:	S
Enforcemnt FY:	2005	Enforcement Action:	08/01/2005
Enforcement Detail:	State CCR Follow-up Notice		
Enforcement Category:	Informal		
Violation ID:	10907	Orig Code:	S
Enforcemnt FY:	2007	Enforcement Action:	09/01/2007
Enforcement Detail:	State CCR Follow-up Notice		
Enforcement Category:	Informal		
Violation ID:	10907	Orig Code:	S
Enforcemnt FY:	2007	Enforcement Action:	09/11/2007
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	11008	Orig Code:	S
Enforcemnt FY:	2008	Enforcement Action:	07/22/2008
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	11008	Orig Code:	S
Enforcemnt FY:	2008	Enforcement Action:	08/12/2008
Enforcement Detail:	State CCR Follow-up Notice		
Enforcement Category:	Informal		
Violation ID:	11209	Orig Code:	S
Enforcemnt FY:	2009	Enforcement Action:	07/02/2009
Enforcement Detail:	St Public Notif received	Enforcement Category:	Informal
Violation ID:	11209	Orig Code:	S
Enforcemnt FY:	2009	Enforcement Action:	06/03/2009
Enforcement Detail:	St Violation/Reminder Notice		
Enforcement Category:	Informal		
Violation ID:	11209	Orig Code:	S
Enforcemnt FY:	2009	Enforcement Action:	06/03/2009
Enforcement Detail:	St Public Notif requested	Enforcement Category:	Informal
Violation ID:	11612	Orig Code:	S
Enforcemnt FY:	2012	Enforcement Action:	01/30/2012
Enforcement Detail:	St Public Notif requested	Enforcement Category:	Informal
Violation ID:	11612	Orig Code:	S
Enforcemnt FY:	2012	Enforcement Action:	02/08/2012
Enforcement Detail:	St Public Notif received	Enforcement Category:	Informal
Violation ID:	11612	Orig Code:	S
Enforcemnt FY:	2012	Enforcement Action:	01/30/2012
Enforcement Detail:	St Violation/Reminder Notice		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Enforcement Category:	Informal		
Violation ID:	11613	Orig Code:	S
Enforcement FY:	2012	Enforcement Action:	07/11/2012
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
PWS name:	HAPEVILLE	Population served:	5385
PWS type code:	C	Violation ID:	10101
Contaminant:	7000	Violation type:	71
Compliance start date:	7/1/2001 0:00:00	Compliance end date:	8/31/2001 0:00:00
Enforcement date:	7/2/2001 0:00:00	Enforcement action:	State Intentional no-action
Violation measurement:	Not Reported		
PWS name:	HAPEVILLE	Population served:	5385
PWS type code:	C	Violation ID:	10101
Contaminant:	7000	Violation type:	71
Compliance start date:	7/1/2001 0:00:00	Compliance end date:	8/31/2001 0:00:00
Enforcement date:	8/31/2001 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		
PWS name:	HAPEVILLE	Population served:	5385
PWS type code:	C	Violation ID:	10402
Contaminant:	7000	Violation type:	71
Compliance start date:	7/1/2002 0:00:00	Compliance end date:	7/18/2002 0:00:00
Enforcement date:	7/18/2002 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		
PWS name:	HAPEVILLE	Population served:	5385
PWS type code:	C	Violation ID:	10402
Contaminant:	7000	Violation type:	71
Compliance start date:	7/1/2002 0:00:00	Compliance end date:	7/18/2002 0:00:00
Enforcement date:	7/2/2002 0:00:00	Enforcement action:	State Violation/Reminder Notice
Violation measurement:	Not Reported		
PWS name:	HAPEVILLE	Population served:	5385
PWS type code:	C	Violation ID:	10603
Contaminant:	7000	Violation type:	71
Compliance start date:	7/1/2003 0:00:00	Compliance end date:	8/18/2003 0:00:00
Enforcement date:	8/11/2003 0:00:00	Enforcement action:	SII
Violation measurement:	Not Reported		
PWS name:	HAPEVILLE	Population served:	5385
PWS type code:	C	Violation ID:	10603
Contaminant:	7000	Violation type:	71
Compliance start date:	7/1/2003 0:00:00	Compliance end date:	8/18/2003 0:00:00
Enforcement date:	8/18/2003 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		
PWS name:	HAPEVILLE	Population served:	5385
PWS type code:	C	Violation ID:	10704
Contaminant:	7000	Violation type:	71
Compliance start date:	7/1/2004 0:00:00	Compliance end date:	7/7/2004 0:00:00
Enforcement date:	7/1/2004 0:00:00	Enforcement action:	State Intentional no-action
Violation measurement:	Not Reported		
PWS name:	HAPEVILLE	Population served:	5385
PWS type code:	C	Violation ID:	10704
Contaminant:	7000	Violation type:	71
Compliance start date:	7/1/2004 0:00:00	Compliance end date:	7/7/2004 0:00:00
Enforcement date:	7/7/2004 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

PWS name:	HAPEVILLE	Population served:	5385
PWS type code:	C	Violation ID:	10805
Contaminant:	7000	Violation type:	71
Compliance start date:	7/1/2005 0:00:00	Compliance end date:	8/9/2005 0:00:00
Enforcement date:	7/1/2005 0:00:00	Enforcement action:	State Intentional no-action
Violation measurement:	Not Reported		
PWS name:	HAPEVILLE	Population served:	5385
PWS type code:	C	Violation ID:	10805
Contaminant:	7000	Violation type:	71
Compliance start date:	7/1/2005 0:00:00	Compliance end date:	8/9/2005 0:00:00
Enforcement date:	8/1/2005 0:00:00	Enforcement action:	SII
Violation measurement:	Not Reported		
PWS name:	HAPEVILLE	Population served:	5385
PWS type code:	C	Violation ID:	10805
Contaminant:	7000	Violation type:	71
Compliance start date:	7/1/2005 0:00:00	Compliance end date:	8/9/2005 0:00:00
Enforcement date:	8/9/2005 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		
PWS name:	HAPEVILLE	Population served:	5385
PWS type code:	C	Violation ID:	10907
Contaminant:	7000	Violation type:	71
Compliance start date:	7/1/2007 0:00:00	Compliance end date:	9/11/2007 0:00:00
Enforcement date:	9/1/2007 0:00:00	Enforcement action:	SII
Violation measurement:	Not Reported		
PWS name:	HAPEVILLE	Population served:	5385
PWS type code:	C	Violation ID:	10907
Contaminant:	7000	Violation type:	71
Compliance start date:	7/1/2007 0:00:00	Compliance end date:	9/11/2007 0:00:00
Enforcement date:	9/11/2007 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		
PWS name:	HAPEVILLE	Population served:	5385
PWS type code:	C	Violation ID:	11008
Contaminant:	7000	Violation type:	71
Compliance start date:	7/1/2008 0:00:00	Compliance end date:	7/22/2008 0:00:00
Enforcement date:	7/22/2008 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		
PWS name:	HAPEVILLE	Population served:	5385
PWS type code:	C	Violation ID:	11008
Contaminant:	7000	Violation type:	71
Compliance start date:	7/1/2008 0:00:00	Compliance end date:	7/22/2008 0:00:00
Enforcement date:	8/12/2008 0:00:00	Enforcement action:	SII
Violation measurement:	Not Reported		

**C13
North
1 - 2 Miles
Higher**

FRDS PWS GA1210037

Epa region:	04	State:	GA
Pwsid:	GA1210037	Pwsname:	PROVIDENCE PARK
Cityserved:	Not Reported	Stateserved:	GA
Zipsserved:	Not Reported	Fipscounty:	13121
Status:	Closed	Retpopsrvd:	400
Pwssvconn:	1	Psource longname:	Groundwater
Pwstype:	TNCWS	Owner:	Local_Govt

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Contact:	CULBRETH, JOHN	Contactorgname:	CULBRETH, JOHN
Contactphone:	404-730-6200	Contactaddress1:	141 PRIOR ST., SW SUITE 8054
Contactaddress2:	Not Reported	Contactcity:	ATLANTA
Contactstate:	GA	Contactzip:	30303
Pwsactivitycode:	I		
Pwsid:	GA1210037	Facid:	1033
Facname:	WELL #1 PLANT	Factype:	Treatment_plant
Facactivitycode:	A	Trtobjective:	disinfection
Trtprocess:	hypochlorination, post	Factypecode:	TP
PWS ID:	GA1210037	PWS type:	Not Reported
PWS name:	Not Reported	PWS address:	Not Reported
PWS city:	Not Reported	PWS state:	Not Reported
PWS zip:	Not Reported	PWS ID:	GA1210037
Activity status:	Active	Date system activated:	Not Reported
Date system deactivated:	Not Reported	Retail population:	00000400
System name:	PROVIDENCE PARK	System address:	PROVIDENCE PARK
System address:	13440 PROVIDENCE ROAD	System city:	ALPHARETTA
System state:	GA	System zip:	30201
Population served:	101 - 500 Persons	Treatment:	Treated
Latitude:	334456	Longitude:	0842317
Latitude:	335031	Longitude:	0842844
Violation id:	20203	Orig code:	S
State:	GA	Violation Year:	2003
Contamination code:	3100	Contamination Name:	Coliform (TCR)
Violation code:	23	Violation name:	Monitoring, Routine Major (TCR)
Rule code:	110	Rule name:	TCR
Violation measur:	Not Reported	Unit of measure:	Not Reported
State mcl:	Not Reported	Cmp bdt:	01/01/2003
Cmp edt:	03/31/2003		
Violation id:	20306	Orig code:	S
State:	GA	Violation Year:	2005
Contamination code:	1040	Contamination Name:	Nitrate
Violation code:	03	Violation name:	Monitoring, Regular
Rule code:	331	Rule name:	Nitrates
Violation measur:	Not Reported	Unit of measure:	Not Reported
State mcl:	Not Reported	Cmp bdt:	01/01/2005
Cmp edt:	12/31/2005		
Violation id:	20407	Orig code:	S
State:	GA	Violation Year:	2006
Contamination code:	3100	Contamination Name:	Coliform (TCR)
Violation code:	23	Violation name:	Monitoring, Routine Major (TCR)
Rule code:	110	Rule name:	TCR
Violation measur:	Not Reported	Unit of measure:	Not Reported
State mcl:	Not Reported	Cmp bdt:	10/01/2006
Cmp edt:	12/31/2006		
Violation ID:	20203	Orig Code:	S
Enforcemnt FY:	2003	Enforcement Action:	04/16/2003
Enforcement Detail:	St Public Notif requested	Enforcement Category:	Informal
Violation ID:	20203	Orig Code:	S
Enforcemnt FY:	2003	Enforcement Action:	04/16/2003
Enforcement Detail:	St Violation/Reminder Notice		
Enforcement Category:	Informal		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Violation ID:	20306	Orig Code:	S
Enforcemnt FY:	2006	Enforcement Action:	02/21/2006
Enforcement Detail:	St Public Notif requested	Enforcement Category:	Informal
Violation ID:	20306	Orig Code:	S
Enforcemnt FY:	2006	Enforcement Action:	06/08/2006
Enforcement Detail:	St Public Notif received	Enforcement Category:	Informal
Violation ID:	20306	Orig Code:	S
Enforcemnt FY:	2006	Enforcement Action:	08/15/2006
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	20306	Orig Code:	S
Enforcemnt FY:	2006	Enforcement Action:	02/21/2006
Enforcement Detail:	St Violation/Reminder Notice		
Enforcement Category:	Informal		
Violation ID:	20407	Orig Code:	S
Enforcemnt FY:	2007	Enforcement Action:	01/19/2007
Enforcement Detail:	St Violation/Reminder Notice		
Enforcement Category:	Informal		
Violation ID:	20407	Orig Code:	S
Enforcemnt FY:	2007	Enforcement Action:	01/19/2007
Enforcement Detail:	St Public Notif requested	Enforcement Category:	Informal

**C14
North
1 - 2 Miles
Higher**

FRDS PWS GA1210002

Epa region:	04	State:	GA
Pwsid:	GA1210002	Pwsname:	COLLEGE PARK
Cityserved:	Not Reported	Stateserved:	GA
Zipsserved:	Not Reported	Fipscounty:	13121
Status:	Active	Retpopsrvd:	20382
Pwssvconn:	2620	Psource longname:	Purch_surface_water
Pwstype:	CWS	Owner:	Local_Govt
Contact:	LEE, PHIL	Contactorgname:	LEE, PHIL
Contactphone:	404-669-3757	Contactaddress1:	1886 W HARVARD AVE.
Contactaddress2:	Not Reported	Contactcity:	COLLEGE PARK
Contactstate:	GA	Contactzip:	30337
Pwsactivitycode:	A		
PWS ID:	GA1210002	PWS name:	COLLEGE PARK
Address:	1886 WEST HARVARD AVE.	Care of:	CITY OF COLLEGE PARK
City:	COLLEGE PARK	State:	GA
Zip:	30337	Owner:	COLLEGE PARK
Source code:	Purchases surface water	Population:	20645
PWS ID:	GA1210002	PWS type:	Not Reported
PWS name:	Not Reported	PWS address:	Not Reported
PWS city:	Not Reported	PWS state:	Not Reported
PWS zip:	Not Reported	PWS name:	COLLEGE PARK
PWS type code:	C	Retail population served:	20382
Contact:	HOWARD, JR., JESSIE	Contact address:	POB 87137
Contact address:	COLLEGE PARK	Contact city:	GA
Contact state:	30	Contact zip:	404-669-37
Contact telephone:	Not Reported		
PWS ID:	GA1210002	Activity status:	Active

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Date system activated:	Not Reported	Date system deactivated:	Not Reported
Retail population:	00020457	System name:	COLLEGE PARK
System address:	CITY OF COLLEGE PARK	System address:	1886 WEST HARVARD AVE.
System city:	COLLEGE PARK	System state:	GA
System zip:	30337		
Population served:	10,001 - 50,000 Persons	Treatment:	Treated
Latitude:	335031	Longitude:	0842844
Violation id:	10301	Orig code:	S
State:	GA	Violation Year:	2001
Contamination code:	7000	Contamination Name:	Consumer Confidence Rule
Violation code:	71	Violation name:	CCR Complete Failure to Report
Rule code:	420	Rule name:	CCR
Violation measur:	Not Reported	Unit of measure:	Not Reported
State mcl:	Not Reported	Cmp bdt:	07/01/2001
Cmp edt:	Not Reported		
Violation id:	11407	Orig code:	S
State:	GA	Violation Year:	2006
Contamination code:	5000	Contamination Name:	Lead and Copper Rule
Violation code:	52	Violation name:	Follow-up Or Routine LCR Tap M/R
Rule code:	350	Rule name:	LCR
Violation measur:	Not Reported	Unit of measure:	Not Reported
State mcl:	Not Reported	Cmp bdt:	10/01/2006
Cmp edt:	Not Reported		
Violation ID:	10301	Orig Code:	S
Enforcemnt FY:	2001	Enforcement Action:	07/02/2001
Enforcement Detail:	St Intentional no-action	Enforcement Category:	Resolving
Violation ID:	10301	Orig Code:	S
Enforcemnt FY:	2001	Enforcement Action:	08/10/2001
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	11407	Orig Code:	S
Enforcemnt FY:	2007	Enforcement Action:	03/02/2007
Enforcement Detail:	St Public Notif requested	Enforcement Category:	Informal
Violation ID:	11407	Orig Code:	S
Enforcemnt FY:	2007	Enforcement Action:	03/02/2007
Enforcement Detail:	St Violation/Reminder Notice		
Enforcement Category:	Informal		
Violation ID:	11407	Orig Code:	S
Enforcemnt FY:	2010	Enforcement Action:	09/14/2010
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
PWS name:	COLLEGE PARK	Population served:	20382
PWS type code:	C	Violation ID:	10301
Contaminant:	7000	Violation type:	71
Compliance start date:	7/1/2001 0:00:00	Compliance end date:	8/10/2001 0:00:00
Enforcement date:	7/2/2001 0:00:00	Enforcement action:	State Intentional no-action
Violation measurement:	Not Reported		
PWS name:	COLLEGE PARK	Population served:	20382
PWS type code:	C	Violation ID:	10301
Contaminant:	7000	Violation type:	71
Compliance start date:	7/1/2001 0:00:00	Compliance end date:	8/10/2001 0:00:00
Enforcement date:	8/10/2001 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

PWS name:	COLLEGE PARK	Population served:	20382
PWS type code:	C	Violation ID:	11407
Contaminant:	LEAD & COPPER RULE	Violation type:	Follow-up and Routine Tap Sampling
Compliance start date:	10/1/2006 0:00:00	Compliance end date:	12/31/2025 0:00:00
Enforcement date:	3/2/2007 0:00:00	Enforcement action:	State Violation/Reminder Notice
Violation measurement:	Not Reported		

PWS name:	COLLEGE PARK	Population served:	20382
PWS type code:	C	Violation ID:	11407
Contaminant:	LEAD & COPPER RULE	Violation type:	Follow-up and Routine Tap Sampling
Compliance start date:	10/1/2006 0:00:00	Compliance end date:	12/31/2025 0:00:00
Enforcement date:	3/2/2007 0:00:00	Enforcement action:	State Public Notif Requested
Violation measurement:	Not Reported		

**C15
North
1 - 2 Miles
Higher**

FRDS PWS GA1210039

Epa region:	04	State:	GA
Pwsid:	GA1210039	Pwsname:	CHAMPIONS CLUB OF ATLANTA
Cityserved:	Not Reported	Stateserved:	GA
Zipsserved:	Not Reported	Fipscounty:	13121
Status:	Closed	Retpopsrvd:	255
Pwssvconn:	2	Psource longname:	Groundwater
Pwstype:	NTNCWS	Owner:	Private
Contact:	MELNIK, STEVE	Contactorgname:	Not Reported
Contactphone:	904-356-1000	Contactaddress1:	111 RIVERSIDE AVE., SUITE 330
Contactaddress2:	Not Reported	Contactcity:	JACKSONVILLE
Contactstate:	FL	Contactzip:	33202
Pwsactivitycode:	I		

Pwsid:	GA1210039	Facid:	1035
Facname:	WELL #1 PLANT	Factype:	Treatment_plant
Facactivitycode:	I	Trtobjective:	disinfection
Trtprocess:	hypochlorination, post	Factypecode:	TP

PWS ID:	GA1210039	PWS type:	Not Reported
PWS name:	Not Reported	PWS address:	Not Reported
PWS city:	Not Reported	PWS state:	Not Reported
PWS zip:	Not Reported	PWS ID:	GA1210039
Activity status:	Active	Date system activated:	Not Reported
Date system deactivated:	Not Reported	Retail population:	00000025
System name:	CHAMPIONS CLUB-HOPEWELL DOWNS		
System address:	CHAMPIONS CLUB-HOPEWELL DOWNS		
System address:	15135 HOPEWELL ROAD	System city:	ALPHARETTA
System state:	GA	System zip:	30201

Population served:	101 - 500 Persons	Treatment:	Treated
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Latitude:	340431	Longitude:	0841739
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Latitude:	335031	Longitude:	0842844
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PWS currently has or had major violation(s) or enforcement:Yes

Violation ID:	9200001	Violation source ID:	Not Reported
PWS telephone:	Not Reported	Contaminant:	COLIFORM (TCR)
Violation type:	Monitoring, Routine Major (TCR)		
Violation start date:	010192	Violation end date:	033192
Violation period (months):	003	Violation awareness date:	Not Reported

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Major violator:	Yes	Maximum contaminant level:	Not Reported
Number of required samples:	Not Reported	Number of samples taken:	Not Reported
Analysis method:	Not Reported	Analysis result:	Not Reported

PWS currently has or had major violation(s) or enforcement: Yes

Violation ID:	9200002	Violation source ID:	Not Reported
PWS telephone:	Not Reported	Contaminant:	COLIFORM (TCR)
Violation type:	Monitoring, Routine Major (TCR)		
Violation start date:	040192	Violation end date:	063092
Violation period (months):	003	Violation awareness date:	Not Reported
Major violator:	Yes	Maximum contaminant level:	Not Reported
Number of required samples:	Not Reported	Number of samples taken:	Not Reported
Analysis method:	Not Reported	Analysis result:	Not Reported

**C16
North
1 - 2 Miles
Higher**

FRDS PWS GA1210007

Epa region:	04	State:	GA
Pwsid:	GA1210007	Pwsname:	MOUNTAIN PARK
Cityserved:	Not Reported	Stateserved:	GA
Zipserved:	Not Reported	Fipscounty:	13121
Status:	Active	Retpopsrvd:	798
Pwssvconn:	307	Psourcelongname:	Purch_surface_water
Pwstype:	CWS	Owner:	Local_Govt
Contact:	SCHMIDT, BILL	Contactorgname:	SCHMIDT, BILL
Contactphone:	770-993-4231	Contactaddress1:	118 LAKE SHORE DRIVE
Contactaddress2:	Not Reported	Contactcity:	MOUNTAIN PARK
Contactstate:	GA	Contactzip:	30075
Pwsactivitycode:	A		
PWS ID:	GA1210007	PWS name:	MOUNTAIN PARK
Address:	100 MOUNTAIN PARK ROAD	Care of:	CITY OF MOUNTAIN PARK
City:	ROSWELL	State:	GA
Zip:	30075	Owner:	MOUNTAIN PARK
Source code:	Purchases surface water	Population:	679
PWS ID:	GA1210007	PWS type:	Not Reported
PWS name:	Not Reported	PWS address:	Not Reported
PWS city:	Not Reported	PWS state:	Not Reported
PWS zip:	Not Reported	PWS name:	MOUNTAIN PARK
PWS type code:	C	Retail population served:	798
Contact:	SCHMIDT, BILL	Contact address:	118 LAKE SHORE DRIVE
Contact address:	MOUNTAIN PARK	Contact city:	GA
Contact state:	30	Contact zip:	770-993-42
Contact telephone:	Not Reported		
PWS ID:	GA1210007	Activity status:	Active
Date system activated:	Not Reported	Date system deactivated:	Not Reported
Retail population:	0000679	System name:	MOUNTAIN PARK
System address:	CITY OF MOUNTAIN PARK	System address:	100 MOUNTAIN PARK ROAD
System city:	ROSWELL	System state:	GA
System zip:	30075		
Population served:	501 - 1,000 Persons	Treatment:	Treated
Latitude:	335031	Longitude:	0842844
Violation id:	1005	Orig code:	S

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

State:	GA	Violation Year:	2004
Contamination code:	7000	Contamination Name:	Consumer Confidence Rule
Violation code:	71	Violation name:	CCR Complete Failure to Report
Rule code:	420	Rule name:	CCR
Violation measur:	Not Reported	Unit of measure:	Not Reported
State mcl:	Not Reported	Cmp bdt:	07/01/2004
Cmp edt:	Not Reported		
Violation id:	1107	Orig code:	S
State:	GA	Violation Year:	2006
Contamination code:	7000	Contamination Name:	Consumer Confidence Rule
Violation code:	71	Violation name:	CCR Complete Failure to Report
Rule code:	420	Rule name:	CCR
Violation measur:	Not Reported	Unit of measure:	Not Reported
State mcl:	Not Reported	Cmp bdt:	07/01/2006
Cmp edt:	Not Reported		
Violation id:	1408	Orig code:	S
State:	GA	Violation Year:	2007
Contamination code:	7000	Contamination Name:	Consumer Confidence Rule
Violation code:	71	Violation name:	CCR Complete Failure to Report
Rule code:	420	Rule name:	CCR
Violation measur:	Not Reported	Unit of measure:	Not Reported
State mcl:	Not Reported	Cmp bdt:	07/01/2007
Cmp edt:	Not Reported		
Violation id:	1613	Orig code:	S
State:	GA	Violation Year:	2012
Contamination code:	7000	Contamination Name:	Consumer Confidence Rule
Violation code:	71	Violation name:	CCR Complete Failure to Report
Rule code:	420	Rule name:	CCR
Violation measur:	Not Reported	Unit of measure:	Not Reported
State mcl:	Not Reported	Cmp bdt:	07/01/2012
Cmp edt:	Not Reported		
Violation id:	1614	Orig code:	S
State:	GA	Violation Year:	2013
Contamination code:	7000	Contamination Name:	Consumer Confidence Rule
Violation code:	71	Violation name:	CCR Complete Failure to Report
Rule code:	420	Rule name:	CCR
Violation measur:	Not Reported	Unit of measure:	Not Reported
State mcl:	Not Reported	Cmp bdt:	07/01/2013
Cmp edt:	Not Reported		
Violation id:	201	Orig code:	S
State:	GA	Violation Year:	2000
Contamination code:	7000	Contamination Name:	Consumer Confidence Rule
Violation code:	71	Violation name:	CCR Complete Failure to Report
Rule code:	420	Rule name:	CCR
Violation measur:	Not Reported	Unit of measure:	Not Reported
State mcl:	Not Reported	Cmp bdt:	07/01/2000
Cmp edt:	Not Reported		
Violation id:	302	Orig code:	S
State:	GA	Violation Year:	2001
Contamination code:	7000	Contamination Name:	Consumer Confidence Rule
Violation code:	71	Violation name:	CCR Complete Failure to Report
Rule code:	420	Rule name:	CCR
Violation measur:	Not Reported	Unit of measure:	Not Reported
State mcl:	Not Reported	Cmp bdt:	07/01/2001
Cmp edt:	Not Reported		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Violation id:	603	Orig code:	S
State:	GA	Violation Year:	2002
Contamination code:	7000	Contamination Name:	Consumer Confidence Rule
Violation code:	71	Violation name:	CCR Complete Failure to Report
Rule code:	420	Rule name:	CCR
Violation measur:	Not Reported	Unit of measure:	Not Reported
State mcl:	Not Reported	Cmp bdt:	07/01/2002
Cmp edt:	Not Reported		
Violation id:	804	Orig code:	S
State:	GA	Violation Year:	2003
Contamination code:	7000	Contamination Name:	Consumer Confidence Rule
Violation code:	71	Violation name:	CCR Complete Failure to Report
Rule code:	420	Rule name:	CCR
Violation measur:	Not Reported	Unit of measure:	Not Reported
State mcl:	Not Reported	Cmp bdt:	07/01/2003
Cmp edt:	Not Reported		
Violation id:	905	Orig code:	S
State:	GA	Violation Year:	2005
Contamination code:	3100	Contamination Name:	Coliform (TCR)
Violation code:	26	Violation name:	Monitoring, Repeat Minor (TCR)
Rule code:	110	Rule name:	TCR
Violation measur:	Not Reported	Unit of measure:	Not Reported
State mcl:	Not Reported	Cmp bdt:	06/01/2005
Cmp edt:	06/30/2005		
Violation ID:	1005	Orig Code:	S
Enforcemnt FY:	2005	Enforcement Action:	08/01/2005
Enforcement Detail:	State CCR Follow-up Notice		
Enforcement Category:	Informal		
Violation ID:	1005	Orig Code:	S
Enforcemnt FY:	2005	Enforcement Action:	08/29/2005
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	1107	Orig Code:	S
Enforcemnt FY:	2007	Enforcement Action:	09/01/2007
Enforcement Detail:	State CCR Follow-up Notice		
Enforcement Category:	Informal		
Violation ID:	1107	Orig Code:	S
Enforcemnt FY:	2008	Enforcement Action:	10/05/2007
Enforcement Detail:	State CCR Follow-up Notice		
Enforcement Category:	Informal		
Violation ID:	1107	Orig Code:	S
Enforcemnt FY:	2008	Enforcement Action:	09/10/2008
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	1408	Orig Code:	S
Enforcemnt FY:	2008	Enforcement Action:	08/12/2008
Enforcement Detail:	State CCR Follow-up Notice		
Enforcement Category:	Informal		
Violation ID:	1408	Orig Code:	S
Enforcemnt FY:	2008	Enforcement Action:	09/10/2008
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	1613	Orig Code:	S
Enforcemnt FY:	2012	Enforcement Action:	08/27/2012
Enforcement Detail:	State CCR Follow-up Notice		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Enforcement Category:	Informal		
Violation ID:	1613	Orig Code:	S
Enforcement FY:	2013	Enforcement Action:	10/18/2012
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	1614	Orig Code:	S
Enforcement FY:	2013	Enforcement Action:	08/27/2013
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	1614	Orig Code:	S
Enforcement FY:	2013	Enforcement Action:	07/02/2013
Enforcement Detail:	State CCR Follow-up Notice		
Enforcement Category:	Informal		
Violation ID:	201	Orig Code:	S
Enforcement FY:	2001	Enforcement Action:	07/02/2001
Enforcement Detail:	St Intentional no-action	Enforcement Category:	Resolving
Violation ID:	201	Orig Code:	S
Enforcement FY:	2001	Enforcement Action:	09/07/2001
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	302	Orig Code:	S
Enforcement FY:	2002	Enforcement Action:	08/08/2002
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	302	Orig Code:	S
Enforcement FY:	2002	Enforcement Action:	07/23/2002
Enforcement Detail:	St Violation/Reminder Notice		
Enforcement Category:	Informal		
Violation ID:	603	Orig Code:	S
Enforcement FY:	2003	Enforcement Action:	08/19/2003
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	603	Orig Code:	S
Enforcement FY:	2003	Enforcement Action:	08/11/2003
Enforcement Detail:	State CCR Follow-up Notice		
Enforcement Category:	Informal		
Violation ID:	804	Orig Code:	S
Enforcement FY:	2004	Enforcement Action:	09/08/2004
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	804	Orig Code:	S
Enforcement FY:	2004	Enforcement Action:	08/20/2004
Enforcement Detail:	State CCR Follow-up Notice		
Enforcement Category:	Informal		
Violation ID:	905	Orig Code:	S
Enforcement FY:	2005	Enforcement Action:	07/21/2005
Enforcement Detail:	St Violation/Reminder Notice		
Enforcement Category:	Informal		
Violation ID:	905	Orig Code:	S
Enforcement FY:	2005	Enforcement Action:	07/21/2005
Enforcement Detail:	St Public Notif requested	Enforcement Category:	Informal
PWS name:	MOUNTAIN PARK	Population served:	798
PWS type code:	C	Violation ID:	1005
Contaminant:	7000	Violation type:	71

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Compliance start date:	7/1/2005 0:00:00	Compliance end date:	8/29/2005 0:00:00
Enforcement date:	8/1/2005 0:00:00	Enforcement action:	SII
Violation measurement:	Not Reported		
PWS name:	MOUNTAIN PARK	Population served:	798
PWS type code:	C	Violation ID:	1005
Contaminant:	7000	Violation type:	71
Compliance start date:	7/1/2005 0:00:00	Compliance end date:	8/29/2005 0:00:00
Enforcement date:	8/29/2005 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		
PWS name:	MOUNTAIN PARK	Population served:	798
PWS type code:	C	Violation ID:	1107
Contaminant:	7000	Violation type:	71
Compliance start date:	7/1/2007 0:00:00	Compliance end date:	9/10/2008 0:00:00
Enforcement date:	10/5/2007 0:00:00	Enforcement action:	SII
Violation measurement:	Not Reported		
PWS name:	MOUNTAIN PARK	Population served:	798
PWS type code:	C	Violation ID:	1107
Contaminant:	7000	Violation type:	71
Compliance start date:	7/1/2007 0:00:00	Compliance end date:	9/10/2008 0:00:00
Enforcement date:	9/1/2007 0:00:00	Enforcement action:	SII
Violation measurement:	Not Reported		
PWS name:	MOUNTAIN PARK	Population served:	798
PWS type code:	C	Violation ID:	1107
Contaminant:	7000	Violation type:	71
Compliance start date:	7/1/2007 0:00:00	Compliance end date:	9/10/2008 0:00:00
Enforcement date:	9/10/2008 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		
PWS name:	MOUNTAIN PARK	Population served:	798
PWS type code:	C	Violation ID:	1408
Contaminant:	7000	Violation type:	71
Compliance start date:	7/1/2008 0:00:00	Compliance end date:	9/10/2008 0:00:00
Enforcement date:	8/12/2008 0:00:00	Enforcement action:	SII
Violation measurement:	Not Reported		
PWS name:	MOUNTAIN PARK	Population served:	798
PWS type code:	C	Violation ID:	1408
Contaminant:	7000	Violation type:	71
Compliance start date:	7/1/2008 0:00:00	Compliance end date:	9/10/2008 0:00:00
Enforcement date:	9/10/2008 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		
PWS name:	MOUNTAIN PARK	Population served:	798
PWS type code:	C	Violation ID:	201
Contaminant:	7000	Violation type:	71
Compliance start date:	7/1/2001 0:00:00	Compliance end date:	9/7/2001 0:00:00
Enforcement date:	7/2/2001 0:00:00	Enforcement action:	State Intentional no-action
Violation measurement:	Not Reported		
PWS name:	MOUNTAIN PARK	Population served:	798
PWS type code:	C	Violation ID:	201
Contaminant:	7000	Violation type:	71
Compliance start date:	7/1/2001 0:00:00	Compliance end date:	9/7/2001 0:00:00
Enforcement date:	9/7/2001 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		
PWS name:	MOUNTAIN PARK	Population served:	798
PWS type code:	C	Violation ID:	302

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Contaminant: 7000 Compliance start date: 7/1/2002 0:00:00 Enforcement date: 7/23/2002 0:00:00 Violation measurement: Not Reported	Violation type: 71 Compliance end date: 8/8/2002 0:00:00 Enforcement action: State Violation/Reminder Notice
PWS name: MOUNTAIN PARK PWS type code: C Contaminant: 7000 Compliance start date: 7/1/2002 0:00:00 Enforcement date: 8/8/2002 0:00:00 Violation measurement: Not Reported	Population served: 798 Violation ID: 302 Violation type: 71 Compliance end date: 8/8/2002 0:00:00 Enforcement action: State Compliance Achieved
PWS name: MOUNTAIN PARK PWS type code: C Contaminant: 7000 Compliance start date: 7/1/2003 0:00:00 Enforcement date: 8/11/2003 0:00:00 Violation measurement: Not Reported	Population served: 798 Violation ID: 603 Violation type: 71 Compliance end date: 8/19/2003 0:00:00 Enforcement action: SII
PWS name: MOUNTAIN PARK PWS type code: C Contaminant: 7000 Compliance start date: 7/1/2003 0:00:00 Enforcement date: 8/19/2003 0:00:00 Violation measurement: Not Reported	Population served: 798 Violation ID: 603 Violation type: 71 Compliance end date: 8/19/2003 0:00:00 Enforcement action: State Compliance Achieved
PWS name: MOUNTAIN PARK PWS type code: C Contaminant: 7000 Compliance start date: 7/1/2004 0:00:00 Enforcement date: 8/20/2004 0:00:00 Violation measurement: Not Reported	Population served: 798 Violation ID: 804 Violation type: 71 Compliance end date: 9/8/2004 0:00:00 Enforcement action: SII
PWS name: MOUNTAIN PARK PWS type code: C Contaminant: 7000 Compliance start date: 7/1/2004 0:00:00 Enforcement date: 9/8/2004 0:00:00 Violation measurement: Not Reported	Population served: 798 Violation ID: 804 Violation type: 71 Compliance end date: 9/8/2004 0:00:00 Enforcement action: State Compliance Achieved
PWS name: MOUNTAIN PARK PWS type code: C Contaminant: COLIFORM (TCR) Compliance start date: 6/1/2005 0:00:00 Enforcement date: 7/21/2005 0:00:00 Violation measurement: Not Reported	Population served: 798 Violation ID: 905 Violation type: Monitoring, Repeat Minor (TCR) Compliance end date: 6/30/2005 0:00:00 Enforcement action: State Violation/Reminder Notice
PWS name: MOUNTAIN PARK PWS type code: C Contaminant: COLIFORM (TCR) Compliance start date: 6/1/2005 0:00:00 Enforcement date: 7/21/2005 0:00:00 Violation measurement: Not Reported	Population served: 798 Violation ID: 905 Violation type: Monitoring, Repeat Minor (TCR) Compliance end date: 6/30/2005 0:00:00 Enforcement action: State Public Notif Requested

**C17
North
1 - 2 Miles
Higher**

FRDS PWS GA1210005

Epa region: 04	State: GA
Pwsid: GA1210005	Pwsname: NORTH FULTON COUNTY

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Cityserved:	Not Reported	Stateserved:	GA
Zipsserved:	Not Reported	Fipscounty:	13121
Status:	Active	Retpopsrvd:	172533
Pwssvconn:	70291	Psource longname:	Purch_surface_water
Pwstype:	CWS	Owner:	Local_Govt
Contact:	PERSON, PATRICK	Contactorgname:	PERSON, PATRICK
Contactphone:	404-612-9429	Contactaddress1:	1030 MARIETTA HWY
Contactaddress2:	Not Reported	Contactcity:	ROSWELL
Contactstate:	GA	Contactzip:	30075
Pwsactivitycode:	A		
PWS ID:	GA1210005	PWS name:	NORTH FULTON COUNTY
Address:	141 PRYOR ST. SW SUITE 6001	City:	ATLANTA
Care of:	DEPT. OF PUBLIC WORKS	Zip:	30303
State:	GA	Source code:	Purchases surface water
Owner:	NORTH FULTON COUNTY		
Population:	106600		
PWS ID:	GA1210005	PWS type:	Not Reported
PWS name:	Not Reported	PWS address:	Not Reported
PWS city:	Not Reported	PWS state:	Not Reported
PWS zip:	Not Reported	PWS name:	NORTH FULTON COUNTY
PWS type code:	C	Retail population served:	172533
Contact:	BAH, MARIE	Contact address:	1030 MARIETTA HWY.
Contact address:	ROSWELL	Contact city:	GA
Contact state:	30	Contact zip:	404-612-02
Contact telephone:	Not Reported		
PWS ID:	GA1210005	Activity status:	Active
Date system activated:	Not Reported	Date system deactivated:	Not Reported
Retail population:	00060000	System name:	NORTH FULTON COUNTY
System address:	NORTH FULTON WATER SYSTEM	System address:	1030 MARIETTA HIGHWAY
System city:	ROSWELL	System state:	GA
System zip:	300754732		
Population served:	50,001 - 75,000 Persons	Treatment:	Treated
Latitude:	335031	Longitude:	0842844
Latitude:	335031	Longitude:	0842844
Latitude:	335031	Longitude:	0842844
Latitude:	335031	Longitude:	0842844
Violation id:	10102	Orig code:	S
State:	GA	Violation Year:	2002
Contamination code:	7000	Contamination Name:	Consumer Confidence Rule
Violation code:	71	Violation name:	CCR Complete Failure to Report
Rule code:	420	Rule name:	CCR
Violation measur:	Not Reported	Unit of measure:	Not Reported
State mcl:	Not Reported	Cmp bdt:	07/01/2002
Cmp edt:	Not Reported		
Violation id:	10304	Orig code:	S
State:	GA	Violation Year:	2002
Contamination code:	5000	Contamination Name:	Lead and Copper Rule
Violation code:	52	Violation name:	Follow-up Or Routine LCR Tap M/R
Rule code:	350	Rule name:	LCR
Violation measur:	Not Reported	Unit of measure:	Not Reported
State mcl:	Not Reported	Cmp bdt:	10/01/2002
Cmp edt:	Not Reported		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Violation id:	10404	Orig code:	S
State:	GA	Violation Year:	2004
Contamination code:	7000	Contamination Name:	Consumer Confidence Rule
Violation code:	71	Violation name:	CCR Complete Failure to Report
Rule code:	420	Rule name:	CCR
Violation measur:	Not Reported	Unit of measure:	Not Reported
State mcl:	Not Reported	Cmp bdt:	07/01/2004
Cmp edt:	Not Reported		
Violation id:	10606	Orig code:	S
State:	GA	Violation Year:	2006
Contamination code:	7000	Contamination Name:	Consumer Confidence Rule
Violation code:	71	Violation name:	CCR Complete Failure to Report
Rule code:	420	Rule name:	CCR
Violation measur:	Not Reported	Unit of measure:	Not Reported
State mcl:	Not Reported	Cmp bdt:	07/01/2006
Cmp edt:	Not Reported		
Violation id:	10808	Orig code:	S
State:	GA	Violation Year:	2008
Contamination code:	7000	Contamination Name:	Consumer Confidence Rule
Violation code:	71	Violation name:	CCR Complete Failure to Report
Rule code:	420	Rule name:	CCR
Violation measur:	Not Reported	Unit of measure:	Not Reported
State mcl:	Not Reported	Cmp bdt:	07/01/2008
Cmp edt:	Not Reported		
Violation ID:	10102	Orig Code:	S
Enforcemnt FY:	2002	Enforcement Action:	07/18/2002
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	10102	Orig Code:	S
Enforcemnt FY:	2002	Enforcement Action:	07/23/2002
Enforcement Detail:	St Violation/Reminder Notice		
Enforcement Category:	Informal		
Violation ID:	10304	Orig Code:	S
Enforcemnt FY:	2003	Enforcement Action:	02/03/2003
Enforcement Detail:	St Violation/Reminder Notice		
Enforcement Category:	Informal		
Violation ID:	10304	Orig Code:	S
Enforcemnt FY:	2003	Enforcement Action:	09/22/2003
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	10404	Orig Code:	S
Enforcemnt FY:	2004	Enforcement Action:	07/02/2004
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	10404	Orig Code:	S
Enforcemnt FY:	2004	Enforcement Action:	07/01/2004
Enforcement Detail:	St Intentional no-action	Enforcement Category:	Resolving
Violation ID:	10606	Orig Code:	S
Enforcemnt FY:	2006	Enforcement Action:	07/21/2006
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	10606	Orig Code:	S
Enforcemnt FY:	2006	Enforcement Action:	07/21/2006
Enforcement Detail:	St Intentional no-action	Enforcement Category:	Resolving
Violation ID:	10808	Orig Code:	S

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Enforcemnt FY:	2008	Enforcement Action:	08/12/2008
Enforcement Detail:	State CCR Follow-up Notice		
Enforcement Category:	Informal		
Violation ID:	10808	Orig Code:	S
Enforcemnt FY:	2008	Enforcement Action:	08/14/2008
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
PWS name:	NORTH FULTON COUNTY	Population served:	172533
PWS type code:	C	Violation ID:	10102
Contaminant:	7000	Violation type:	71
Compliance start date:	7/1/2002 0:00:00	Compliance end date:	7/18/2002 0:00:00
Enforcement date:	7/18/2002 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		
PWS name:	NORTH FULTON COUNTY	Population served:	172533
PWS type code:	C	Violation ID:	10102
Contaminant:	7000	Violation type:	71
Compliance start date:	7/1/2002 0:00:00	Compliance end date:	7/18/2002 0:00:00
Enforcement date:	7/23/2002 0:00:00	Enforcement action:	State Violation/Reminder Notice
Violation measurement:	Not Reported		
PWS name:	NORTH FULTON COUNTY	Population served:	172533
PWS type code:	C	Violation ID:	10304
Contaminant:	LEAD & COPPER RULE	Violation type:	Follow-up and Routine Tap Sampling
Compliance start date:	10/1/2002 0:00:00	Compliance end date:	9/22/2003 0:00:00
Enforcement date:	2/3/2003 0:00:00	Enforcement action:	State Violation/Reminder Notice
Violation measurement:	Not Reported		
PWS name:	NORTH FULTON COUNTY	Population served:	172533
PWS type code:	C	Violation ID:	10304
Contaminant:	LEAD & COPPER RULE	Violation type:	Follow-up and Routine Tap Sampling
Compliance start date:	10/1/2002 0:00:00	Compliance end date:	9/22/2003 0:00:00
Enforcement date:	9/22/2003 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		
PWS name:	NORTH FULTON COUNTY	Population served:	172533
PWS type code:	C	Violation ID:	10404
Contaminant:	7000	Violation type:	71
Compliance start date:	7/1/2004 0:00:00	Compliance end date:	7/2/2004 0:00:00
Enforcement date:	7/1/2004 0:00:00	Enforcement action:	State Intentional no-action
Violation measurement:	Not Reported		
PWS name:	NORTH FULTON COUNTY	Population served:	172533
PWS type code:	C	Violation ID:	10404
Contaminant:	7000	Violation type:	71
Compliance start date:	7/1/2004 0:00:00	Compliance end date:	7/2/2004 0:00:00
Enforcement date:	7/2/2004 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		
PWS name:	NORTH FULTON COUNTY	Population served:	172533
PWS type code:	C	Violation ID:	10606
Contaminant:	7000	Violation type:	71
Compliance start date:	7/1/2006 0:00:00	Compliance end date:	7/21/2006 0:00:00
Enforcement date:	7/21/2006 0:00:00	Enforcement action:	State Intentional no-action
Violation measurement:	Not Reported		
PWS name:	NORTH FULTON COUNTY	Population served:	172533
PWS type code:	C	Violation ID:	10606
Contaminant:	7000	Violation type:	71
Compliance start date:	7/1/2006 0:00:00	Compliance end date:	7/21/2006 0:00:00
Enforcement date:	7/21/2006 0:00:00	Enforcement action:	State Compliance Achieved

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Violation measurement: Not Reported

PWS name: NORTH FULTON COUNTY
 PWS type code: C
 Contaminant: 7000
 Compliance start date: 7/1/2008 0:00:00
 Enforcement date: 8/12/2008 0:00:00
 Violation measurement: Not Reported

Population served: 172533
 Violation ID: 10808
 Violation type: 71
 Compliance end date: 8/14/2008 0:00:00
 Enforcement action: SII

PWS name: NORTH FULTON COUNTY
 PWS type code: C
 Contaminant: 7000
 Compliance start date: 7/1/2008 0:00:00
 Enforcement date: 8/14/2008 0:00:00
 Violation measurement: Not Reported

Population served: 172533
 Violation ID: 10808
 Violation type: 71
 Compliance end date: 8/14/2008 0:00:00
 Enforcement action: State Compliance Achieved

**18
 East
 1 - 2 Miles
 Lower**

FRDS PWS GA1210001

Epa region: 04
 Pwsid: GA1210001
 Cityserved: Not Reported
 Zipserved: Not Reported
 Status: Active
 Pwssvconn: 240780
 Pwstype: CWS
 Contact: PARKER, RICHARD
 Contactphone: 404-235-2058
 Contactaddress2: Not Reported
 Contactstate: GA
 Pwsactivitycode: A

State: GA
 Pwsname: ATLANTA
 Stateserved: GA
 Fipscounty: 13089
 Retpopsrvd: 650000
 Psource longname: Surface_water
 Owner: Local_Govt
 Contactorgname: PARKER, RICHARD
 Contactaddress1: 651 14TH STREET, NW
 Contactcity: ATLANTA
 Contactzip: 30318

Pwsid: GA1210001
 Facname: HEMPHILL PLANT
 Facactivitycode: A
 Trtprocess: gaseous chlorination, pre

Facid: 1027
 Factype: Treatment_plant
 Trtobjective: disinfection
 Factypecode: TP

Pwsid: GA1210001
 Facname: HEMPHILL PLANT
 Facactivitycode: A
 Trtprocess: rapid mix

Facid: 1027
 Factype: Treatment_plant
 Trtobjective: particulate removal
 Factypecode: TP

Pwsid: GA1210001
 Facname: HEMPHILL PLANT
 Facactivitycode: A
 Trtprocess: ph adjustment, pre

Facid: 1027
 Factype: Treatment_plant
 Trtobjective: particulate removal
 Factypecode: TP

Pwsid: GA1210001
 Facname: HEMPHILL PLANT
 Facactivitycode: A
 Trtprocess: coagulation

Facid: 1027
 Factype: Treatment_plant
 Trtobjective: particulate removal
 Factypecode: TP

Pwsid: GA1210001
 Facname: HEMPHILL PLANT
 Facactivitycode: A
 Trtprocess: flocculation

Facid: 1027
 Factype: Treatment_plant
 Trtobjective: particulate removal
 Factypecode: TP

Pwsid: GA1210001
 Facname: HEMPHILL PLANT

Facid: 1027
 Factype: Treatment_plant

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Facactivitycode:	A	Trtobjective:	particulate removal
Trtprocess:	sedimentation	Factypecode:	TP
Pwsid:	GA1210001	Facid:	1027
Facname:	HEMPHILL PLANT	Factype:	Treatment_plant
Facactivitycode:	A	Trtobjective:	particulate removal
Trtprocess:	filtration, rapid sand	Factypecode:	TP
Pwsid:	GA1210001	Facid:	1027
Facname:	HEMPHILL PLANT	Factype:	Treatment_plant
Facactivitycode:	A	Trtobjective:	corrosion control
Trtprocess:	ph adjustment, post	Factypecode:	TP
Pwsid:	GA1210001	Facid:	1027
Facname:	HEMPHILL PLANT	Factype:	Treatment_plant
Facactivitycode:	A	Trtobjective:	disinfection
Trtprocess:	gaseous chlorination, post	Factypecode:	TP
Facactivitycode:	TP		
Pwsid:	GA1210001	Facid:	2816
Facname:	CHATTAHOOCHEE PLANT	Factype:	Treatment_plant
Facactivitycode:	A	Trtobjective:	disinfection
Trtprocess:	gaseous chlorination, pre	Factypecode:	TP
Pwsid:	GA1210001	Facid:	2816
Facname:	CHATTAHOOCHEE PLANT	Factype:	Treatment_plant
Facactivitycode:	A	Trtobjective:	particulate removal
Trtprocess:	rapid mix	Factypecode:	TP
Pwsid:	GA1210001	Facid:	2816
Facname:	CHATTAHOOCHEE PLANT	Factype:	Treatment_plant
Facactivitycode:	A	Trtobjective:	particulate removal
Trtprocess:	ph adjustment, pre	Factypecode:	TP
Pwsid:	GA1210001	Facid:	2816
Facname:	CHATTAHOOCHEE PLANT	Factype:	Treatment_plant
Facactivitycode:	A	Trtobjective:	particulate removal
Trtprocess:	coagulation	Factypecode:	TP
Pwsid:	GA1210001	Facid:	2816
Facname:	CHATTAHOOCHEE PLANT	Factype:	Treatment_plant
Facactivitycode:	A	Trtobjective:	particulate removal
Trtprocess:	flocculation	Factypecode:	TP
Pwsid:	GA1210001	Facid:	2816
Facname:	CHATTAHOOCHEE PLANT	Factype:	Treatment_plant
Facactivitycode:	A	Trtobjective:	particulate removal
Trtprocess:	sedimentation	Factypecode:	TP
Pwsid:	GA1210001	Facid:	2816
Facname:	CHATTAHOOCHEE PLANT	Factype:	Treatment_plant
Facactivitycode:	A	Trtobjective:	particulate removal
Trtprocess:	filtration, rapid sand	Factypecode:	TP
Pwsid:	GA1210001	Facid:	2816
Facname:	CHATTAHOOCHEE PLANT	Factype:	Treatment_plant
Facactivitycode:	A	Trtobjective:	corrosion control
Trtprocess:	ph adjustment, post	Factypecode:	TP
Pwsid:	GA1210001	Facid:	2816
Facname:	CHATTAHOOCHEE PLANT	Factype:	Treatment_plant
Facactivitycode:	A	Trtobjective:	disinfection

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Trtprocess: gaseous chlorination, post
 Facticecode: TP

PWS ID:	GA1210001	PWS name:	ATLANTA
Address:	2528 CHATTAHOOCHEE CIR., NW		
Care of:	ATLANTA WATER DEPARTMENT	City:	ATLANTA
State:	GA	Zip:	30318
Owner:	ATLANTA	Source code:	Surface water
Population:	649836		

PWS ID:	GA1210001	PWS type:	Not Reported
PWS name:	Not Reported	PWS address:	Not Reported
PWS city:	Not Reported	PWS state:	Not Reported
PWS zip:	Not Reported	PWS name:	ATLANTA
PWS type code:	C	Retail population served:	650000
Contact:	HEBERD, CHRISTOPHER	Contact address:	651 14TH STREET
Contact address:	ATLANTA	Contact city:	GA
Contact state:	30	Contact zip:	404-602-44
Contact telephone:	Not Reported		

County:	FULTON	Source:	Surface water
Treatment Objective:	CORROSION CONTROL	Process:	PH ADJUSTMENT, POST
Population:	650000		

County:	FULTON	Source:	Surface water
Treatment Objective:	DISINFECTION	Process:	GASEOUS CHLORINATION, POST
Population:	650000		

County:	FULTON	Source:	Surface water
Treatment Objective:	DISINFECTION	Process:	GASEOUS CHLORINATION, PRE
Population:	650000		

County:	FULTON	Source:	Surface water
Treatment Objective:	PARTICULATE REMOVAL	Process:	COAGULATION
Population:	650000		

County:	FULTON	Source:	Surface water
Treatment Objective:	PARTICULATE REMOVAL	Process:	FILTRATION, RAPID SAND
Population:	650000		

County:	FULTON	Source:	Surface water
Treatment Objective:	PARTICULATE REMOVAL	Process:	FLOCCULATION
Population:	650000		

County:	FULTON	Source:	Surface water
Treatment Objective:	PARTICULATE REMOVAL	Process:	RAPID MIX
Population:	650000		

County:	FULTON	Source:	Surface water
Treatment Objective:	PARTICULATE REMOVAL	Process:	SEDIMENTATION
Population:	650000		

County:	FULTON	Source:	Surface water
Treatment Objective:	PARTICULATE REMOVAL	Process:	PH ADJUSTMENT, PRE
Population:	650000		

PWS ID:	GA1210001	Activity status:	Active
Date system activated:	Not Reported	Date system deactivated:	Not Reported
Retail population:	00649836	System name:	ATLANTA
System address:	ATLANTA WATER BUREAU	System address:	2541 CHATTAHOOCHEE CIRCLE, NW
System city:	ATLANTA	System state:	GA
System zip:	30318		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Population served:	over 100,000 Persons	Treatment:	Treated
Latitude:	334941	Longitude:	0842727
State:	GA	Latitude degrees:	33
Latitude minutes:	49	Latitude seconds:	41.0000
Longitude degrees:	84	Longitude minutes:	27
Longitude seconds:	27.0000		
Violation id:	10097	Orig code:	S
State:	GA	Violation Year:	1997
Contamination code:	5000	Contamination Name:	Lead and Copper Rule
Violation code:	52	Violation name:	Follow-up Or Routine LCR Tap M/R
Rule code:	350	Rule name:	LCR
Violation measur:	Not Reported	Unit of measure:	Not Reported
State mcl:	Not Reported	Cmp bdt:	07/01/1997
Cmp edt:	Not Reported		
Violation id:	10502	Orig code:	S
State:	GA	Violation Year:	2002
Contamination code:	0300	Contamination Name:	IESWTR
Violation code:	38		
Violation name:	Monitoring, Turbidity (Enhanced SWTR)		
Rule code:	122	Rule name:	LT1 ESWTR
Violation measur:	0	Unit of measure:	Not Reported
State mcl:	0	Cmp bdt:	01/01/2002
Cmp edt:	01/31/2002		
Violation id:	11303	Orig code:	S
State:	GA	Violation Year:	2000
Contamination code:	5000	Contamination Name:	Lead and Copper Rule
Violation code:	52	Violation name:	Follow-up Or Routine LCR Tap M/R
Rule code:	350	Rule name:	LCR
Violation measur:	Not Reported	Unit of measure:	Not Reported
State mcl:	Not Reported	Cmp bdt:	10/01/2000
Cmp edt:	Not Reported		
Violation id:	11406	Orig code:	S
State:	GA	Violation Year:	2005
Contamination code:	7000	Contamination Name:	Consumer Confidence Rule
Violation code:	71	Violation name:	CCR Complete Failure to Report
Rule code:	420	Rule name:	CCR
Violation measur:	Not Reported	Unit of measure:	Not Reported
State mcl:	Not Reported	Cmp bdt:	07/01/2005
Cmp edt:	Not Reported		
Violation id:	11607	Orig code:	S
State:	GA	Violation Year:	2006
Contamination code:	7000	Contamination Name:	Consumer Confidence Rule
Violation code:	71	Violation name:	CCR Complete Failure to Report
Rule code:	420	Rule name:	CCR
Violation measur:	Not Reported	Unit of measure:	Not Reported
State mcl:	Not Reported	Cmp bdt:	07/01/2006
Cmp edt:	Not Reported		
Violation id:	11909	Orig code:	S
State:	GA	Violation Year:	2008
Contamination code:	7000	Contamination Name:	Consumer Confidence Rule
Violation code:	71	Violation name:	CCR Complete Failure to Report
Rule code:	420	Rule name:	CCR
Violation measur:	Not Reported	Unit of measure:	Not Reported
State mcl:	Not Reported	Cmp bdt:	07/01/2008

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Cmp edt:	Not Reported		
Violation id:	12511	Orig code:	S
State:	GA	Violation Year:	2010
Contamination code:	7000	Contamination Name:	Consumer Confidence Rule
Violation code:	71	Violation name:	CCR Complete Failure to Report
Rule code:	420	Rule name:	CCR
Violation measur:	Not Reported	Unit of measure:	Not Reported
State mcl:	Not Reported	Cmp bdt:	07/01/2010
Cmp edt:	Not Reported		
Violation id:	12616	Orig code:	S
State:	GA	Violation Year:	2013
Contamination code:	2950	Contamination Name:	TTHM
Violation code:	02	Violation name:	MCL, Average
Rule code:	220	Rule name:	St2 DBP
Violation measur:	0.081	Unit of measure:	MG/L
State mcl:	0.08	Cmp bdt:	04/01/2013
Cmp edt:	06/30/2013		
Violation id:	12617	Orig code:	S
State:	GA	Violation Year:	2014
Contamination code:	2950	Contamination Name:	TTHM
Violation code:	02	Violation name:	MCL, Average
Rule code:	220	Rule name:	St2 DBP
Violation measur:	0.082	Unit of measure:	MG/L
State mcl:	0.08	Cmp bdt:	01/01/2014
Cmp edt:	03/31/2014		
Violation ID:	10502	Orig Code:	S
Enforcemnt FY:	2002	Enforcement Action:	07/09/2002
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	10502	Orig Code:	S
Enforcemnt FY:	2003	Enforcement Action:	05/06/2003
Enforcement Detail:	St BCA signed	Enforcement Category:	Formal
Violation ID:	10502	Orig Code:	S
Enforcemnt FY:	2002	Enforcement Action:	02/28/2002
Enforcement Detail:	St Public Notif requested	Enforcement Category:	Informal
Violation ID:	10502	Orig Code:	S
Enforcemnt FY:	2002	Enforcement Action:	02/28/2002
Enforcement Detail:	St Violation/Reminder Notice		
Enforcement Category:	Informal		
Violation ID:	10502	Orig Code:	S
Enforcemnt FY:	2002	Enforcement Action:	07/09/2002
Enforcement Detail:	St Public Notif received	Enforcement Category:	Informal
Violation ID:	11303	Orig Code:	S
Enforcemnt FY:	2001	Enforcement Action:	09/03/2001
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	11406	Orig Code:	S
Enforcemnt FY:	2006	Enforcement Action:	08/15/2006
Enforcement Detail:	State CCR Follow-up Notice		
Enforcement Category:	Informal		
Violation ID:	11406	Orig Code:	S
Enforcemnt FY:	2006	Enforcement Action:	07/24/2006
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Violation ID:	11406	Orig Code:	S
Enforcemnt FY:	2006	Enforcement Action:	07/24/2006
Enforcement Detail:	St Intentional no-action	Enforcement Category:	Resolving
Violation ID:	11607	Orig Code:	S
Enforcemnt FY:	2007	Enforcement Action:	07/09/2007
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	11607	Orig Code:	S
Enforcemnt FY:	2007	Enforcement Action:	07/12/2007
Enforcement Detail:	St Intentional no-action	Enforcement Category:	Resolving
Violation ID:	11909	Orig Code:	S
Enforcemnt FY:	2009	Enforcement Action:	07/07/2009
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	12511	Orig Code:	S
Enforcemnt FY:	2012	Enforcement Action:	10/05/2011
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	12616	Orig Code:	S
Enforcemnt FY:	2013	Enforcement Action:	05/23/2013
Enforcement Detail:	St Public Notif requested	Enforcement Category:	Informal
Violation ID:	12616	Orig Code:	S
Enforcemnt FY:	2013	Enforcement Action:	05/23/2013
Enforcement Detail:	St Violation/Reminder Notice		
Enforcement Category:	Informal		
PWS name:	ATLANTA	Population served:	650000
PWS type code:	C	Violation ID:	10502
Contaminant:	0300	Violation type:	38
Compliance start date:	1/1/2002 0:00:00	Compliance end date:	1/31/2002 0:00:00
Enforcement date:	2/28/2002 0:00:00	Enforcement action:	State Violation/Reminder Notice
Violation measurement:	0		
PWS name:	ATLANTA	Population served:	650000
PWS type code:	C	Violation ID:	10502
Contaminant:	0300	Violation type:	38
Compliance start date:	1/1/2002 0:00:00	Compliance end date:	1/31/2002 0:00:00
Enforcement date:	2/28/2002 0:00:00	Enforcement action:	State Public Notif Requested
Violation measurement:	0		
PWS name:	ATLANTA	Population served:	650000
PWS type code:	C	Violation ID:	10502
Contaminant:	0300	Violation type:	38
Compliance start date:	1/1/2002 0:00:00	Compliance end date:	1/31/2002 0:00:00
Enforcement date:	5/6/2003 0:00:00	Enforcement action:	State BCA Signed
Violation measurement:	0		
PWS name:	ATLANTA	Population served:	650000
PWS type code:	C	Violation ID:	10502
Contaminant:	0300	Violation type:	38
Compliance start date:	1/1/2002 0:00:00	Compliance end date:	1/31/2002 0:00:00
Enforcement date:	7/9/2002 0:00:00	Enforcement action:	State Public Notif Received
Violation measurement:	0		
PWS name:	ATLANTA	Population served:	650000
PWS type code:	C	Violation ID:	10502
Contaminant:	0300	Violation type:	38
Compliance start date:	1/1/2002 0:00:00	Compliance end date:	1/31/2002 0:00:00
Enforcement date:	7/9/2002 0:00:00	Enforcement action:	State Compliance Achieved

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Violation measurement:	0		
PWS name:	ATLANTA	Population served:	650000
PWS type code:	C	Violation ID:	11303
Contaminant:	LEAD & COPPER RULE	Violation type:	Follow-up and Routine Tap Sampling
Compliance start date:	10/1/2000 0:00:00	Compliance end date:	9/3/2001 0:00:00
Enforcement date:	9/3/2001 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		
PWS name:	ATLANTA	Population served:	650000
PWS type code:	C	Violation ID:	11406
Contaminant:	7000	Violation type:	71
Compliance start date:	7/1/2006 0:00:00	Compliance end date:	7/24/2006 0:00:00
Enforcement date:	7/24/2006 0:00:00	Enforcement action:	State Intentional no-action
Violation measurement:	Not Reported		
PWS name:	ATLANTA	Population served:	650000
PWS type code:	C	Violation ID:	11406
Contaminant:	7000	Violation type:	71
Compliance start date:	7/1/2006 0:00:00	Compliance end date:	7/24/2006 0:00:00
Enforcement date:	7/24/2006 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		
PWS name:	ATLANTA	Population served:	650000
PWS type code:	C	Violation ID:	11406
Contaminant:	7000	Violation type:	71
Compliance start date:	7/1/2006 0:00:00	Compliance end date:	7/24/2006 0:00:00
Enforcement date:	8/15/2006 0:00:00	Enforcement action:	SII
Violation measurement:	Not Reported		
PWS name:	ATLANTA	Population served:	650000
PWS type code:	C	Violation ID:	11607
Contaminant:	7000	Violation type:	71
Compliance start date:	7/1/2007 0:00:00	Compliance end date:	7/9/2007 0:00:00
Enforcement date:	7/12/2007 0:00:00	Enforcement action:	State Intentional no-action
Violation measurement:	Not Reported		
PWS name:	ATLANTA	Population served:	650000
PWS type code:	C	Violation ID:	11607
Contaminant:	7000	Violation type:	71
Compliance start date:	7/1/2007 0:00:00	Compliance end date:	7/9/2007 0:00:00
Enforcement date:	7/9/2007 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

**D19
NNW
1 - 2 Miles
Higher**

GA WELLS 000002233

County code:	067	Well num:	10EE39
Remarks:	BP GAS STN S ATLANTA ROAD	Lat:	335041
Lon:	0842922	Latlon datum:	NAD27
Alt:	930	Alt datum:	NGVD29
Depth:	39	Depth to casing:	29
Casing dia:	2	Casing matl:	P
Depth to top:	29	Depth to bot:	39
Opening type:	P	Constr date:	19900724
Discharge:	Not Reported	Prim use:	U
Aquifer code:	110SPRL	Edr id:	000002233

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation

Database EDR ID Number

D20
NNW
1 - 2 Miles
Higher

FED USGS USGS40000265168

Organization ID:	USGS-GA	Organization Name:	USGS Georgia Water Science Center
Monitor Location:	10EE39	Type:	Well
Description:	BP GAS STN S ATLANTA ROAD	HUC:	03130001
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Piedmont and Blue Ridge crystalline-rock aquifers		
Formation Type:	Saprolite	Aquifer Type:	Unconfined single aquifer
Construction Date:	19900724	Well Depth:	39
Well Depth Units:	ft	Well Hole Depth:	39.5
Well Hole Depth Units:	ft		

Ground water levels,Number of Measurements:	1	Level reading date:	1995-06-27
Feet below surface:	29.62	Feet to sea level:	Not Reported
Note:	Not Reported		

E21
NE
1 - 2 Miles
Lower

FED USGS USGS40000265154

Organization ID:	USGS-GA	Organization Name:	USGS Georgia Water Science Center
Monitor Location:	10EE29	Type:	Well
Description:	RICHARD L. AECK	HUC:	03130001
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Not Reported	Formation Type:	Not Reported
Aquifer Type:	Not Reported	Construction Date:	19721101
Well Depth:	430	Well Depth Units:	ft
Well Hole Depth:	430	Well Hole Depth Units:	ft

E22
NE
1 - 2 Miles
Lower

GA WELLS 0000004660

County code:	121	Well num:	10EE29
Remarks:	RICHARD L. AECK	Lat:	335028
Lon:	0842734	Latlon datum:	NAD27
Alt:	850.00	Alt datum:	NGVD29
Depth:	430	Depth to casing:	50.00
Casing dia:	6.00	Casing matl:	S
Depth to top:	50.00	Depth to bot:	430.00
Opening type:	X	Constr date:	197211
Discharge:	100.00	Prim use:	H
Aquifer code:	Not Reported	Edr id:	0000004660

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation

Database EDR ID Number

F23
NW
1 - 2 Miles
Higher

GA WELLS 000002232

County code:	067	Well num:	10EE04
Remarks:	COOK, D.W.	Lat:	335037
Lon:	0842959	Latlon datum:	NAD27
Alt:	1020	Alt datum:	NGVD29
Depth:	109	Depth to casing:	40
Casing dia:	6	Casing matl:	Not Reported
Depth to top:	40	Depth to bot:	109
Opening type:	X	Constr date:	1941
Discharge:	Not Reported	Prim use:	H
Aquifer code:	320CRSL	Edr id:	000002232

F24
NW
1 - 2 Miles
Higher

FED USGS USGS40000265164

Organization ID:	USGS-GA	Organization Name:	USGS Georgia Water Science Center
Monitor Location:	10EE04	Type:	Well
Description:	COOK, D.W.	HUC:	03130002
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Piedmont and Blue Ridge crystalline-rock aquifers		
Formation Type:	Crystalline Rocks	Aquifer Type:	Confined multiple aquifer
Construction Date:	1941	Well Depth:	109
Well Depth Units:	ft	Well Hole Depth:	109
Well Hole Depth Units:	ft		

Ground water levels,Number of Measurements:	40	Level reading date:	1987-10-26
Feet below surface:	59.19	Feet to sea level:	Not Reported
Note:	Not Reported		
Level reading date:	1986-07-28	Feet below surface:	72.92
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1985-05-31	Feet below surface:	56.03
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1984-05-31	Feet below surface:	51.34
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1983-11-01	Feet below surface:	55.29
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1983-05-31	Feet below surface:	53.16
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1982-10-26	Feet below surface:	58.36
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1982-05-25	Feet below surface:	58.47
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1981-10-22	Feet below surface:	59.23

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1981-05-21	Feet below surface:	55.67
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1980-11-13	Feet below surface:	53.71
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1980-05-29	Feet below surface:	52.66
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1979-10-25	Feet below surface:	55.06
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1979-05-23	Feet below surface:	53.91
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1978-12-07	Feet below surface:	56.54
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1978-10-18	Feet below surface:	56.24
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1978-05-25	Feet below surface:	52.85
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1978-04-21	Feet below surface:	52.58
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1978-03-31	Feet below surface:	53.44
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1978-03-01	Feet below surface:	52.98
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1978-01-30	Feet below surface:	56.05
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1977-12-28	Feet below surface:	56.87
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1977-12-01	Feet below surface:	57.61
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1977-10-27	Feet below surface:	57.15
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1977-09-30	Feet below surface:	57.84
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1977-08-26	Feet below surface:	54.00
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1977-07-27	Feet below surface:	56.65
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1977-06-28	Feet below surface:	56.00
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1977-05-26	Feet below surface:	55.57
Feet to sea level:	Not Reported	Note:	Not Reported

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Level reading date:	1977-05-02	Feet below surface:	55.60
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1977-03-28	Feet below surface:	56.39
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1977-02-23	Feet below surface:	57.05
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1977-01-26	Feet below surface:	56.54
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1976-10-21	Feet below surface:	54.20
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1976-10-14	Feet below surface:	54.25
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1976-06-03	Feet below surface:	52.03
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1975-11-14	Feet below surface:	53.24
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1975-05-15	Feet below surface:	51.10
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1974-10-18	Feet below surface:	54.03
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1943-04-02	Feet below surface:	55
Feet to sea level:	Not Reported	Note:	Not Reported

25
WNW
1 - 2 Miles
Higher

FED USGS USGS40000265145

Organization ID:	USGS-GA	Organization Name:	USGS Georgia Water Science Center
Monitor Location:	09EE08	Type:	Well
Description:	Josephine Harris	HUC:	03130002
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Not Reported	Formation Type:	Not Reported
Aquifer Type:	Not Reported	Construction Date:	1935
Well Depth:	72	Well Depth Units:	ft
Well Hole Depth:	Not Reported	Well Hole Depth Units:	Not Reported

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS RADON

AREA RADON INFORMATION

Federal EPA Radon Zone for COBB County: 1

- Note: Zone 1 indoor average level > 4 pCi/L.
 : Zone 2 indoor average level >= 2 pCi/L and <= 4 pCi/L.
 : Zone 3 indoor average level < 2 pCi/L.

Federal Area Radon Information for Zip Code: 30080

Number of sites tested: 3

Area	Average Activity	% <4 pCi/L	% 4-20 pCi/L	% >20 pCi/L
Living Area - 1st Floor	1.067 pCi/L	100%	0%	0%
Living Area - 2nd Floor	Not Reported	Not Reported	Not Reported	Not Reported
Basement	3.300 pCi/L	67%	33%	0%

PHYSICAL SETTING SOURCE RECORDS SEARCHED

TOPOGRAPHIC INFORMATION

USGS 7.5' Digital Elevation Model (DEM)

Source: United States Geologic Survey

EDR acquired the USGS 7.5' Digital Elevation Model in 2002 and updated it in 2006. The 7.5 minute DEM corresponds to the USGS 1:24,000- and 1:25,000-scale topographic quadrangle maps. The DEM provides elevation data with consistent elevation units and projection.

HYDROLOGIC INFORMATION

Flood Zone Data: This data was obtained from the Federal Emergency Management Agency (FEMA). It depicts 100-year and 500-year flood zones as defined by FEMA. It includes the National Flood Hazard Layer (NFHL) which incorporates Flood Insurance Rate Map (FIRM) data and Q3 data from FEMA in areas not covered by NFHL.

Source: FEMA

Telephone: 877-336-2627

Date of Government Version: 2003, 2015

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002, 2005 and 2010 from the U.S. Fish and Wildlife Service.

State Wetlands Data: Wetlands Inventory

Source: Georgia GIS Clearinghouse

Telephone: 706-542-1581

HYDROGEOLOGIC INFORMATION

AQUIFLOW^R Information System

Source: EDR proprietary database of groundwater flow information

EDR has developed the AQUIFLOW Information System (AIS) to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted to regulatory authorities at select sites and has extracted the date of the report, hydrogeologically determined groundwater flow direction and depth to water table information.

GEOLOGIC INFORMATION

Geologic Age and Rock Stratigraphic Unit

Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - A digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

STATSGO: State Soil Geographic Database

Source: Department of Agriculture, Natural Resources Conservation Service (NRCS)

The U.S. Department of Agriculture's (USDA) Natural Resources Conservation Service (NRCS) leads the national Conservation Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. Soil maps for STATSGO are compiled by generalizing more detailed (SSURGO) soil survey maps.

SSURGO: Soil Survey Geographic Database

Source: Department of Agriculture, Natural Resources Conservation Service (NRCS)

Telephone: 800-672-5559

SSURGO is the most detailed level of mapping done by the Natural Resources Conservation Service, mapping scales generally range from 1:12,000 to 1:63,360. Field mapping methods using national standards are used to construct the soil maps in the Soil Survey Geographic (SSURGO) database. SSURGO digitizing duplicates the original soil survey maps. This level of mapping is designed for use by landowners, townships and county natural resource planning and management.

PHYSICAL SETTING SOURCE RECORDS SEARCHED

LOCAL / REGIONAL WATER AGENCY RECORDS

FEDERAL WATER WELLS

PWS: Public Water Systems

Source: EPA/Office of Drinking Water

Telephone: 202-564-3750

Public Water System data from the Federal Reporting Data System. A PWS is any water system which provides water to at least 25 people for at least 60 days annually. PWSs provide water from wells, rivers and other sources.

PWS ENF: Public Water Systems Violation and Enforcement Data

Source: EPA/Office of Drinking Water

Telephone: 202-564-3750

Violation and Enforcement data for Public Water Systems from the Safe Drinking Water Information System (SDWIS) after August 1995. Prior to August 1995, the data came from the Federal Reporting Data System (FRDS).

USGS Water Wells: USGS National Water Inventory System (NWIS)

This database contains descriptive information on sites where the USGS collects or has collected data on surface water and/or groundwater. The groundwater data includes information on wells, springs, and other sources of groundwater.

STATE RECORDS

Georgia Public Supply Wells

Source: Georgia Department of Community Affairs

Telephone: 404-894-0127

USGS Georgia Water Wells

Source: USGS, Georgia District Office

Telephone: 770-903-9100

OTHER STATE DATABASE INFORMATION

DNR Managed Lands

Source: Department of Natural Resources

Telephone: 706-557-3032

This dataset provides 1:24,000-scale data depicting boundaries of land parcels making up the public lands managed by the Georgia Department of Natural Resources (GDNR). It includes polygon representations of State Parks, State Historic Parks, State Conservation Parks, State Historic Sites, Wildlife Management Areas, Public Fishing Areas, Fish Hatcheries, Natural Areas and other specially-designated areas. The data were collected and located by the Georgia Department of Natural Resources. Boundaries were digitized from survey plats or other information.

RADON

Area Radon Information

Source: USGS

Telephone: 703-356-4020

The National Radon Database has been developed by the U.S. Environmental Protection Agency (USEPA) and is a compilation of the EPA/State Residential Radon Survey and the National Residential Radon Survey. The study covers the years 1986 - 1992. Where necessary data has been supplemented by information collected at private sources such as universities and research institutions.

EPA Radon Zones

Source: EPA

Telephone: 703-356-4020

Sections 307 & 309 of IRAA directed EPA to list and identify areas of U.S. with the potential for elevated indoor radon levels.

OTHER

Airport Landing Facilities: Private and public use landing facilities

Source: Federal Aviation Administration, 800-457-6656

Epicenters: World earthquake epicenters, Richter 5 or greater

Source: Department of Commerce, National Oceanic and Atmospheric Administration

Earthquake Fault Lines: The fault lines displayed on EDR's Topographic map are digitized quaternary faultlines, prepared in 1975 by the United State Geological Survey

PHYSICAL SETTING SOURCE RECORDS SEARCHED

STREET AND ADDRESS INFORMATION

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APPENDIX B

ANALYTICAL DATA REPORTS

October 07, 2021

Joju Abraham
Georgia Power-CCR
2480 Maner Road
Atlanta, GA 30339

RE: Project: PLANT MCDONOUGH AP-1 TEST PITS
Pace Project No.: 92562122

Dear Joju Abraham:

Enclosed are the analytical results for sample(s) received by the laboratory on September 16, 2021. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

- Pace Analytical Services - Ormond Beach

If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Nicole D'Oleo
nicole.d'oleo@pacelabs.com
(704)875-9092
Project Manager

Enclosures

cc: Stephen Benda
Daniela Herrera, Golder
Ben Hodges, Georgia Power
Kristen Jurinko
J. Shelby Mobley
Charles Norton, Southern Company
Ms. Lauren Petty, Southern Company
Dawn Prell, Golder Associates Inc.
Tim Richards, Golder Associates - Atlanta



REPORT OF LABORATORY ANALYSIS

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CERTIFICATIONS

Project: PLANT MCDONOUGH AP-1 TEST PITS

Pace Project No.: 92562122

Pace Analytical Services Ormond Beach

8 East Tower Circle, Ormond Beach, FL 32174

Alaska DEC- CS/UST/LUST

Alabama Certification #: 41320

Colorado Certification: FL NELAC Reciprocity

Connecticut Certification #: PH-0216

Delaware Certification: FL NELAC Reciprocity

Florida Certification #: E83079

Georgia Certification #: 955

Guam Certification: FL NELAC Reciprocity

Hawaii Certification: FL NELAC Reciprocity

Illinois Certification #: 200068

Indiana Certification: FL NELAC Reciprocity

Kansas Certification #: E-10383

Kentucky Certification #: 90050

Louisiana Certification #: FL NELAC Reciprocity

Louisiana Environmental Certificate #: 05007

Maine Certification #: FL01264

Maryland Certification: #346

Michigan Certification #: 9911

Mississippi Certification: FL NELAC Reciprocity

Missouri Certification #: 236

Montana Certification #: Cert 0074

Nebraska Certification: NE-OS-28-14

New Hampshire Certification #: 2958

New Jersey Certification #: FL022

New York Certification #: 11608

North Carolina Environmental Certificate #: 667

North Carolina Certification #: 12710

North Dakota Certification #: R-216

Ohio DEP 87780

Oklahoma Certification #: D9947

Pennsylvania Certification #: 68-00547

Puerto Rico Certification #: FL01264

South Carolina Certification: #96042001

Tennessee Certification #: TN02974

Texas Certification: FL NELAC Reciprocity

US Virgin Islands Certification: FL NELAC Reciprocity

Virginia Environmental Certification #: 460165

West Virginia Certification #: 9962C

Wisconsin Certification #: 399079670

Wyoming (EPA Region 8): FL NELAC Reciprocity

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SAMPLE SUMMARY

Project: PLANT MCDONOUGH AP-1 TEST PITS

Pace Project No.: 92562122

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92562122001	TP-8-6-7.5'	Solid	02/23/21 12:00	09/16/21 16:12
92562122002	TP-11-5-8'	Solid	02/23/21 12:00	09/16/21 16:12
92562122003	TP-12-2-5'	Solid	02/23/21 12:00	09/16/21 16:12
92562122004	TP-9-6-8'	Solid	02/23/21 12:00	09/16/21 16:12

REPORT OF LABORATORY ANALYSIS

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SAMPLE ANALYTE COUNT

Project: PLANT MCDONOUGH AP-1 TEST PITS
Pace Project No.: 92562122

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
92562122001	TP-8-6-7.5'	EPA 6010	EMG, KC2, SR2	17	PASI-O
		ASTM D2974-87	AS3	1	PASI-O
92562122002	TP-11-5-8'	EPA 6010	EMG	17	PASI-O
		ASTM D2974-87	AS3	1	PASI-O
92562122003	TP-12-2-5'	EPA 6010	EMG	17	PASI-O
		ASTM D2974-87	AS3	1	PASI-O
92562122004	TP-9-6-8'	EPA 6010	EMG	17	PASI-O
		ASTM D2974-87	AS3	1	PASI-O

PASI-O = Pace Analytical Services - Ormond Beach

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: PLANT MCDONOUGH AP-1 TEST PITS

Pace Project No.: 92562122

Sample: TP-8-6-7.5' **Lab ID:** 92562122001 Collected: 02/23/21 12:00 Received: 09/16/21 16:12 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual
			Limit	MDL	DF				
6010 MET ICP									
Analytical Method: EPA 6010 Preparation Method: EPA 3050									
Pace Analytical Services - Ormond Beach									
Aluminum	20500	mg/kg	78.5	47.9	5	09/23/21 12:23	09/24/21 12:38	7429-90-5	
Antimony	ND	mg/kg	5.9	2.9	5	09/23/21 12:23	09/24/21 12:38	7440-36-0	
Arsenic	ND	mg/kg	0.79	0.39	1	09/23/21 12:23	09/23/21 18:35	7440-38-2	H3,M1
Barium	215	mg/kg	3.9	0.66	5	09/23/21 12:23	09/24/21 12:38	7440-39-3	H3,M1
Beryllium	1.4	mg/kg	0.079	0.039	1	09/23/21 12:23	09/23/21 18:35	7440-41-7	
Boron	ND	mg/kg	3.9	0.64	1	09/23/21 12:23	09/23/21 18:35	7440-42-8	
Cadmium	0.58	mg/kg	0.079	0.039	1	09/23/21 12:23	09/23/21 18:35	7440-43-9	H3,M1, R1
Chromium	33.7	mg/kg	0.39	0.20	1	09/23/21 12:23	09/23/21 18:35	7440-47-3	H3,M1
Cobalt	12.4	mg/kg	0.79	0.088	1	09/23/21 12:23	09/23/21 18:35	7440-48-4	
Iron	27300	mg/kg	157	47.1	10	09/23/21 12:23	09/27/21 12:35	7439-89-6	H3,M1
Lead	7.0	mg/kg	0.79	0.39	1	09/23/21 12:23	09/23/21 18:35	7439-92-1	H3,M1, R1
Lithium	18.3 I	mg/kg	39.3	10.8	1	09/23/21 12:23	09/23/21 18:35	7439-93-2	N2
Manganese	1140	mg/kg	7.9	3.9	20	09/23/21 12:23	09/27/21 13:31	7439-96-5	H3
Molybdenum	1.5	mg/kg	0.79	0.39	1	09/23/21 12:23	09/23/21 18:35	7439-98-7	H3,R1
Selenium	ND	mg/kg	1.2	0.59	1	09/23/21 12:23	09/23/21 18:35	7782-49-2	H3,M1
Strontium	9.8	mg/kg	0.79	0.39	1	09/23/21 12:23	09/23/21 18:35	7440-24-6	
Thallium	ND	mg/kg	5.9	2.9	5	09/23/21 12:23	09/24/21 12:38	7440-28-0	H3

Percent Moisture

Analytical Method: ASTM D2974-87
Pace Analytical Services - Ormond Beach

Percent Moisture	26.2	%	0.10	0.10	1		09/23/21 13:49		
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REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: PLANT MCDONOUGH AP-1 TEST PITS

Pace Project No.: 92562122

Sample: TP-11-5-8' Lab ID: 92562122002 Collected: 02/23/21 12:00 Received: 09/16/21 16:12 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual
			Limit	MDL	DF				
6010 MET ICP									
Analytical Method: EPA 6010 Preparation Method: EPA 3050									
Pace Analytical Services - Ormond Beach									
Aluminum	7880	mg/kg	64.5	39.3	5	09/23/21 12:23	09/24/21 15:28	7429-90-5	
Antimony	ND	mg/kg	0.97	0.48	1	09/23/21 12:23	09/23/21 18:47	7440-36-0	
Arsenic	ND	mg/kg	0.64	0.32	1	09/23/21 12:23	09/23/21 18:47	7440-38-2	
Barium	33.5	mg/kg	0.64	0.11	1	09/23/21 12:23	09/23/21 18:47	7440-39-3	
Beryllium	0.44	mg/kg	0.064	0.032	1	09/23/21 12:23	09/23/21 18:47	7440-41-7	
Boron	ND	mg/kg	3.2	0.53	1	09/23/21 12:23	09/23/21 18:47	7440-42-8	
Cadmium	0.10	mg/kg	0.064	0.032	1	09/23/21 12:23	09/23/21 18:47	7440-43-9	
Chromium	6.2	mg/kg	0.32	0.16	1	09/23/21 12:23	09/23/21 18:47	7440-47-3	
Cobalt	1.3	mg/kg	0.64	0.072	1	09/23/21 12:23	09/23/21 18:47	7440-48-4	
Iron	7600	mg/kg	64.5	19.3	5	09/23/21 12:23	09/24/21 15:28	7439-89-6	
Lead	4.6	mg/kg	0.64	0.32	1	09/23/21 12:23	09/23/21 18:47	7439-92-1	
Lithium	ND	mg/kg	32.2	8.9	1	09/23/21 12:23	09/23/21 18:47	7439-93-2	N2
Manganese	38.6	mg/kg	0.32	0.16	1	09/23/21 12:23	09/23/21 18:47	7439-96-5	
Molybdenum	ND	mg/kg	0.64	0.32	1	09/23/21 12:23	09/23/21 18:47	7439-98-7	
Selenium	ND	mg/kg	0.97	0.48	1	09/23/21 12:23	09/23/21 18:47	7782-49-2	
Strontium	4.2	mg/kg	0.64	0.32	1	09/23/21 12:23	09/23/21 18:47	7440-24-6	
Thallium	ND	mg/kg	0.97	0.48	1	09/23/21 12:23	09/23/21 18:47	7440-28-0	
Percent Moisture									
Analytical Method: ASTM D2974-87									
Pace Analytical Services - Ormond Beach									
Percent Moisture	14.7	%	0.10	0.10	1		09/23/21 13:49		

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: PLANT MCDONOUGH AP-1 TEST PITS

Pace Project No.: 92562122

Sample: TP-12-2-5' Lab ID: 92562122003 Collected: 02/23/21 12:00 Received: 09/16/21 16:12 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP									
Analytical Method: EPA 6010 Preparation Method: EPA 3050									
Pace Analytical Services - Ormond Beach									
Aluminum	8930	mg/kg	56.9	34.7	5	09/23/21 12:23	09/24/21 15:36	7429-90-5	
Antimony	ND	mg/kg	0.85	0.43	1	09/23/21 12:23	09/23/21 18:50	7440-36-0	
Arsenic	ND	mg/kg	0.57	0.28	1	09/23/21 12:23	09/23/21 18:50	7440-38-2	
Barium	41.2	mg/kg	0.57	0.096	1	09/23/21 12:23	09/23/21 18:50	7440-39-3	
Beryllium	0.67	mg/kg	0.057	0.028	1	09/23/21 12:23	09/23/21 18:50	7440-41-7	
Boron	ND	mg/kg	2.8	0.47	1	09/23/21 12:23	09/23/21 18:50	7440-42-8	
Cadmium	0.12	mg/kg	0.057	0.028	1	09/23/21 12:23	09/23/21 18:50	7440-43-9	
Chromium	3.0	mg/kg	0.28	0.14	1	09/23/21 12:23	09/23/21 18:50	7440-47-3	
Cobalt	1.9	mg/kg	0.57	0.064	1	09/23/21 12:23	09/23/21 18:50	7440-48-4	
Iron	5130	mg/kg	56.9	17.1	5	09/23/21 12:23	09/24/21 15:36	7439-89-6	
Lead	5.7	mg/kg	0.57	0.28	1	09/23/21 12:23	09/23/21 18:50	7439-92-1	
Lithium	ND	mg/kg	28.5	7.9	1	09/23/21 12:23	09/23/21 18:50	7439-93-2	N2
Manganese	217	mg/kg	1.4	0.71	5	09/23/21 12:23	09/24/21 15:36	7439-96-5	
Molybdenum	4.8	mg/kg	0.57	0.28	1	09/23/21 12:23	09/23/21 18:50	7439-98-7	
Selenium	ND	mg/kg	0.85	0.43	1	09/23/21 12:23	09/23/21 18:50	7782-49-2	
Strontium	3.3	mg/kg	0.57	0.28	1	09/23/21 12:23	09/23/21 18:50	7440-24-6	
Thallium	ND	mg/kg	0.85	0.43	1	09/23/21 12:23	09/23/21 18:50	7440-28-0	

Percent Moisture

Analytical Method: ASTM D2974-87

Pace Analytical Services - Ormond Beach

Percent Moisture	16.3	%	0.10	0.10	1		09/23/21 13:49		
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REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: PLANT MCDONOUGH AP-1 TEST PITS
Pace Project No.: 92562122

Sample: TP-9-6-8' **Lab ID: 92562122004** Collected: 02/23/21 12:00 Received: 09/16/21 16:12 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual
			Limit	MDL	DF				
6010 MET ICP									
Analytical Method: EPA 6010 Preparation Method: EPA 3050									
Pace Analytical Services - Ormond Beach									
Aluminum	11600	mg/kg	68.4	41.7	5	09/23/21 12:23	09/24/21 15:43	7429-90-5	
Antimony	ND	mg/kg	1.0	0.51	1	09/23/21 12:23	09/23/21 18:54	7440-36-0	
Arsenic	ND	mg/kg	0.68	0.34	1	09/23/21 12:23	09/23/21 18:54	7440-38-2	
Barium	24.6	mg/kg	0.68	0.11	1	09/23/21 12:23	09/23/21 18:54	7440-39-3	
Beryllium	0.29	mg/kg	0.068	0.034	1	09/23/21 12:23	09/23/21 18:54	7440-41-7	
Boron	ND	mg/kg	3.4	0.56	1	09/23/21 12:23	09/23/21 18:54	7440-42-8	
Cadmium	0.046 I	mg/kg	0.068	0.034	1	09/23/21 12:23	09/23/21 18:54	7440-43-9	
Chromium	3.3	mg/kg	0.34	0.17	1	09/23/21 12:23	09/23/21 18:54	7440-47-3	
Cobalt	0.59 I	mg/kg	0.68	0.077	1	09/23/21 12:23	09/23/21 18:54	7440-48-4	
Iron	2350	mg/kg	13.7	4.1	1	09/23/21 12:23	09/23/21 18:54	7439-89-6	
Lead	6.8	mg/kg	0.68	0.34	1	09/23/21 12:23	09/23/21 18:54	7439-92-1	
Lithium	ND	mg/kg	34.2	9.4	1	09/23/21 12:23	09/23/21 18:54	7439-93-2	N2
Manganese	22.1	mg/kg	0.34	0.17	1	09/23/21 12:23	09/23/21 18:54	7439-96-5	
Molybdenum	0.98	mg/kg	0.68	0.34	1	09/23/21 12:23	09/23/21 18:54	7439-98-7	
Selenium	ND	mg/kg	1.0	0.51	1	09/23/21 12:23	09/23/21 18:54	7782-49-2	
Strontium	1.6	mg/kg	0.68	0.34	1	09/23/21 12:23	09/23/21 18:54	7440-24-6	
Thallium	ND	mg/kg	1.0	0.51	1	09/23/21 12:23	09/23/21 18:54	7440-28-0	

Percent Moisture

Analytical Method: ASTM D2974-87
Pace Analytical Services - Ormond Beach

Percent Moisture	17.1	%	0.10	0.10	1		09/23/21 13:50		
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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: PLANT MCDONOUGH AP-1 TEST PITS

Pace Project No.: 92562122

QC Batch:	764191	Analysis Method:	EPA 6010
QC Batch Method:	EPA 3050	Analysis Description:	6010 MET Solid
		Laboratory:	Pace Analytical Services - Ormond Beach

Associated Lab Samples: 92562122001, 92562122002, 92562122003, 92562122004

METHOD BLANK: 4176704 Matrix: Solid

Associated Lab Samples: 92562122001, 92562122002, 92562122003, 92562122004

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Aluminum	mg/kg	ND	12.2	7.4	09/24/21 10:43	
Antimony	mg/kg	ND	0.92	0.46	09/24/21 10:43	
Arsenic	mg/kg	ND	0.61	0.31	09/24/21 10:43	
Barium	mg/kg	ND	0.61	0.10	09/24/21 10:43	
Beryllium	mg/kg	ND	0.061	0.031	09/24/21 10:43	
Boron	mg/kg	ND	3.1	0.50	09/24/21 10:43	
Cadmium	mg/kg	ND	0.061	0.031	09/24/21 10:43	
Chromium	mg/kg	ND	0.31	0.15	09/24/21 10:43	
Cobalt	mg/kg	ND	0.61	0.068	09/24/21 10:43	
Iron	mg/kg	ND	12.2	3.7	09/24/21 10:43	
Lead	mg/kg	ND	0.61	0.31	09/24/21 10:43	
Lithium	mg/kg	ND	30.5	8.4	09/24/21 10:43	N2
Manganese	mg/kg	ND	0.31	0.15	09/24/21 10:43	
Molybdenum	mg/kg	ND	0.61	0.31	09/24/21 10:43	
Selenium	mg/kg	ND	0.92	0.46	09/24/21 10:43	
Strontium	mg/kg	ND	0.61	0.31	09/24/21 10:43	
Thallium	mg/kg	ND	0.92	0.46	09/24/21 10:43	

LABORATORY CONTROL SAMPLE: 4176705

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Aluminum	mg/kg	104	120	116	80-120	
Antimony	mg/kg	10.4	10.1	98	80-120	
Arsenic	mg/kg	10.4	10.1	98	80-120	
Barium	mg/kg	10.4	10.3	99	80-120	
Beryllium	mg/kg	1	0.97	93	80-120	
Boron	mg/kg	51.9	47.7	92	80-120	
Cadmium	mg/kg	1	1.0	100	80-120	
Chromium	mg/kg	10.4	10.8	104	80-120	
Cobalt	mg/kg	10.4	10.6	102	80-120	
Iron	mg/kg	104	122	117	80-120	
Lead	mg/kg	10.4	10.2	98	80-120	
Lithium	mg/kg	519	489	94	80-120	N2
Manganese	mg/kg	10.4	11.5	110	80-120	
Molybdenum	mg/kg	10.4	10.4	100	80-120	
Selenium	mg/kg	10.4	8.6	83	80-120	
Strontium	mg/kg	10.4	10.3	99	80-120	
Thallium	mg/kg	10.4	10.2	98	80-120	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: PLANT MCDONOUGH AP-1 TEST PITS

Pace Project No.: 92562122

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4176706 4176707												
Parameter	Units	MS		MSD		MS		MSD		% Rec Limits	Max RPD	Qual
		92562122001 Result	Spike Conc.	Spike Conc.	Result	Result	% Rec	% Rec				
Aluminum	mg/kg	20500	153	120	24600	23100	2650	2180	75-125	6	20	
Antimony	mg/kg	ND	15.3	12.1	ND	3.9 I	34	32	75-125		20	
Arsenic	mg/kg	ND	15.3	12.1	ND	8.1	37	67	75-125		20	H3,M1
Barium	mg/kg	215	15.3	12.1	224	219	63	36	75-125	2	20	H3,M1
Beryllium	mg/kg	1.4	1.49	1.21	2.8	2.3	92	73	75-125	21	20	
Boron	mg/kg	ND	76.6	60	59.3 I	45.3	77	76	75-125		20	
Cadmium	mg/kg	0.58	1.49	1.21	2.9	0.99	151	34	75-125	98	20	H3,M1, R1
Chromium	mg/kg	33.7	15.3	12.1	49.2	52.8	101	159	75-125	7	20	H3,M1
Cobalt	mg/kg	12.4	15.3	12.1	47.4	24.4	229	100	75-125	64	20	
Iron	mg/kg	27300	153	120	26200	24000	-760	-2740	75-125	8	20	E,H3, M1
Lead	mg/kg	7.0	15.3	12.1	20.5	13.5	88	54	75-125	41	20	H3,M1, R1
Lithium	mg/kg	18.3 I	766	600	692 I	504	88	81	75-125		20	N2
Manganese	mg/kg	1140	15.3	12.1	1660	697	3400	-3710	75-125	82	20	E
Molybdenum	mg/kg	1.5	15.3	12.1	20.3	11.4	123	82	75-125	56	20	H3,R1
Selenium	mg/kg	ND	15.3	12.1	ND	8.0	57	67	75-125		20	H3,M1
Strontium	mg/kg	9.8	15.3	12.1	24.7	21.1	97	94	75-125	16	20	
Thallium	mg/kg	ND	15.3	12.1	11.5 I	7.9	75	66	75-125		20	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

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QUALIFIERS

Project: PLANT MCDONOUGH AP-1 TEST PITS

Pace Project No.: 92562122

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

Acid preservation may not be appropriate for 2 Chloroethylvinyl ether.

A separate vial preserved to a pH of 4-5 is recommended in SW846 Chapter 4 for the analysis of Acrolein and Acrylonitrile by EPA Method 8260.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Reported results are not rounded until the final step prior to reporting. Therefore, calculated parameters that are typically reported as "Total" may vary slightly from the sum of the reported component parameters.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

ANALYTE QUALIFIERS

D6 The precision between the sample and sample duplicate exceeded laboratory control limits.

E Analyte concentration exceeded the calibration range. The reported result is estimated.

H3 Sample was received or analysis requested beyond the recognized method holding time.

M1 Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

N2 The lab does not hold NELAC/TNI accreditation for this parameter but other accreditations/certifications may apply. A complete list of accreditations/certifications is available upon request.

R1 RPD value was outside control limits.

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

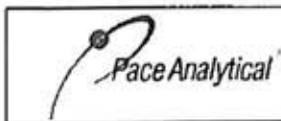
Project: PLANT MCDONOUGH AP-1 TEST PITS

Pace Project No.: 92562122

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92562122001	TP-8-6-7.5'	EPA 3050	764191	EPA 6010	764335
92562122002	TP-11-5-8'	EPA 3050	764191	EPA 6010	764335
92562122003	TP-12-2-5'	EPA 3050	764191	EPA 6010	764335
92562122004	TP-9-6-8'	EPA 3050	764191	EPA 6010	764335
92562122001	TP-8-6-7.5'	ASTM D2974-87	764211		
92562122002	TP-11-5-8'	ASTM D2974-87	764211		
92562122003	TP-12-2-5'	ASTM D2974-87	764211		
92562122004	TP-9-6-8'	ASTM D2974-87	764211		

REPORT OF LABORATORY ANALYSIS

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Document Name:
Sample Condition Upon Receipt (SCUR)

Document Revised: October 28, 2020
Page 1 of 2

Document No.:
F-CAR-CS-033-Rev.07

Issuing Authority:
Pace Carolinas Quality Office

Laboratory receiving samples:

Asheville Eden Greenwood Huntersville Raleigh Mechanicsville Atlanta Kernersville

Sample Condition
Upon Receipt

Client Name:

Project #:

WO#: 92562122

Courier: Fed Ex UPS USPS Client
 Commercial Pace Other:



92562122

Custody Seal Present? Yes No Seals Intact? Yes No

Date/Initials Person Examining Contents: 9/16/21 KAN

Packing Material: Bubble Wrap Bubble Bags None Other

Biological Tissue Frozen?

Yes No N/A

Thermometer:

IR Gun ID: TH12214 Type of Ice: Wet Blue None

Cooler Temp:

23.4 Correction Factor: Add/Subtract (°C) -0.1

Temp should be above freezing to 6°C

Samples out of temp criteria. Samples on ice, cooling process has begun

Cooler Temp Corrected (°C) 23.4

USDA Regulated Soil (water sample)

Did samples originate in a quarantine zone within the United States: CA, NY, or SC (check maps)?

Did samples originate from a foreign source (internationally, including Hawaii and Puerto Rico)? Yes No

			Comments/Discrepancy:
Chain of Custody Present?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	1.	
Samples Arrived within Hold Time?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	2.	All samples arrived out of hold
Short Hold Time Analysis (<72 hr.)?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	3.	
Rush Turn Around Time Requested?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	4.	
Sufficient Volume?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	5.	
Correct Containers Used?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	6.	
-Pace Containers Used?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A		mason jars
Containers Intact?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	7.	
Dissolved analysis: Samples Field Filtered?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	8.	
Sample Labels Match COC?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	9.	
Includes Date/Time/ID/Analysis Matrix: <u>SL</u>			
Headspace in VOA Vials (>5-6mm)?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	10.	
Trip Blank Present?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	11.	
Trip Blank Custody Seals Present?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A		

COMMENTS/SAMPLE DISCREPANCY

Field Data Required? Yes No

Lot ID of split containers:

CLIENT NOTIFICATION/RESOLUTION

proceed with out of hold analysis

Person contacted:

Brian Steele

Date/Time:

9/17/21 16:24

Project Manager SCURF Review:

Date:

Project Manager SRF Review:

Date:



Document Name:
Sample Condition Upon Receipt(SCUR)
 Document No.:
F-CAR-CS-033-Rev.07

Document Revised: October 28, 2020
 Page 2 of 2
 Issuing Authority:
 Pace Carolinas Quality Office

*Check mark top half of box if pH and/or dechlorination is verified and within the acceptance range for preservation samples.

Exceptions: VOA, Coliform, TOC, Oil and Grease, DRO/8015 (water) DOC, LLHG

**Bottom half of box is to list number of bottles

Project #

WO# : 92562122
 PM: NMG Due Date: 09/23/21
 CLIENT: GA-GA Power

Item#	BP4U-125 mL Plastic Unpreserved (N/A) (Cl-)	BP3U-250 mL Plastic Unpreserved (N/A)	BP2U-500 mL Plastic Unpreserved (N/A)	BP1U-1 liter Plastic Unpreserved (N/A)	BP4S-125 mL Plastic H2SO4 (pH < 2) (Cl-)	BP3N-250 mL plastic HNO3 (pH < 2)	BP4Z-125 mL Plastic Zn Acetate & NaOH (>8)	BP4C-125 mL Plastic NaOH (pH > 12) (Cl-)	WGFW-Wide-mouthed Glass jar Unpreserved	AG1U-1 liter Amber Unpreserved (N/A) (Cl-)	AG1H-1 liter Amber HCl (pH < 2)	AG3U-250 mL Amber Unpreserved (N/A) (Cl-)	AG1S-1 liter Amber H2SO4 (pH < 2)	AG3S-250 mL Amber H2SO4 (pH < 2)	AG3A(DG3A)-250 mL Amber NH4Cl (N/A)(Cl-)	DG9H-40 mL VOA HCl (N/A)	VG9T-40 mL VOA Na2S2O3 (N/A)	VG9U-40 mL VOA Unp (N/A)	DG9P-40 mL VOA H3PO4 (N/A)	VOAK (6 vials per kit)-5035 kit (N/A)	V/GK (3 vials per kit)-YPH/Gas kit (N/A)	SPST-125 mL Sterile Plastic (N/A - lab)	SP2T-250 mL Sterile Plastic (N/A - lab)	BP3A-250 mL Plastic (NH2)2SO4 (9.3-9.7)	AG0U-100 mL Amber Unpreserved vials (N/A)	VSGU-20 mL Scintillation vials (N/A)	DG9U-40 mL Amber Unpreserved vials (N/A)	
1	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
2	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
3	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
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9	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
10	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
11	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
12	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/

Sample ID	Type of Preservative	pH upon receipt	Date preservation adjusted	Time preservation adjusted	Amount of Preservative added	Lot #

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. Out of hold, incorrect preservative, out of temp, incorrect containers.



CHAIN-OF-CUSTODY Analytical Request Document

Chain-of-Custody is a LEGAL DOCUMENT - Complete all relevant fields

Company: Georgia Power

Address: 2480 Warner Road

Report To: John Abraham

Copy To: Golder

Customer Project Name/Number: Plant McDonough AP-1 Test A/S

Phone: Email: 404-506-7239

Collected By (print): A. J. Baker

Collected By (signature): A. J. Baker

Sample Disposal: [] Dispose as appropriate [] Return [] Archive [] Hold

Matrix: [] Same Day [] Next Day [] 2 Day [] 3 Day [] 4 Day [] 5 Day

Matrix Codes (insert in Matrix box below): Drinking Water (DW), Ground Water (GW), Wastewater (WW), Product (P), Soil/Solid (SL), Oil (OL), Wipe (W/P), Air (AR), Tissue (TS), Biosassy (B), Vapor (V), Other (OT)

Billing Information:

Email To: j.abraham@spower.com

Site Collection Info/Address:

State: GA / County/City: Time Zone Collected: [] PT [] MT [] CT [] ET

Compliance Monitoring? [] Yes [] No

DW PWS ID #: DW Location Code:

Immediately Packing on Ice: [] Yes [] No

Field Filtered (if applicable): [] Yes [] No

Analysis: [] Yes [] No

LAB USE ONLY - Affix Workorder/Login Label Here or List Pace Workorder Number or MTLI Login Number Here

ALL SHADED AREAS are for LAB USE ONLY

Container Preservative Type

Lab Project Manager:

** Preservative Types: (1) nitric acid, (2) sulfuric acid, (3) hydrochloric acid, (4) sodium hydroxide, (5) zinc acetate, (6) methanol, (7) sodium bisulfate, (8) sodium thiosulfate, (9) hexane, (A) ascorbic acid, (B) ammonium sulfide, (C) ammonium hydroxide, (D) TSP, (U) Unpreserved, (O) Other

Analyses

Lab Profile/Line: Lab Sample Receipt Checklist:

Analyses	Y	N	NA
Appendix IV Metals * see comment	X		
Boron	X		
Strontium	X		
Iron	X		
Aluminum	X		
Manganese	X		
Custody Seal Present/Intact	Y	N	NA
Custody Signature Present	Y	N	NA
Collector Signature Present	Y	N	NA
Bottles Intact	Y	N	NA
Correct Bottles	Y	N	NA
Sufficient Volume	Y	N	NA
Samples Received on Ice	Y	N	NA
VOA - Headspace Acceptable	Y	N	NA
USDA Regulated Solids	Y	N	NA
Samples in Holding Time	Y	N	NA
Residual Chlorine Present	Y	N	NA
Cl Strips:			
Sample pH Acceptable	Y	N	NA
pH Strips:			
Sulfide Present	Y	N	NA
Lead Acetate Strips:			

LAB USE ONLY: Lab Sample # / Comments: 92562122

Customer Sample ID	Matrix *	Comp / Grab	Collected (or Composite Start)		Composite End		Res Cl	# of Cms
			Date	Time	Date	Time		
TP-8-6-7.5'	SL	Grab	2-23-21	1200				
TP-11-5-8'	SL	Grab	2-23-21	1200				
TP-12-2-5'	SL	Grab	2-23-21	1200				
TP-9-6-8'	SL	Grab	2-23-21	1200				

Customer Remarks / Special Conditions / Possible Hazards: * = Sb, As, Ba, Be, Cd, Cr, Co, Pb, L, Mo, Se, Ti

Type of Ice Used: Wet Blue Dry None

SHORT HOLDS PRESENT (<72 hours): Y N N/A

Lab Sample Temperature Info: Temp Blank Received: Y N NA

Relinquished by/Company: (Signature)

Date/Time: 9/16/21

Received by/Company: (Signature)

Date/Time: 9/16/21

Table #: MTLI LAB USE ONLY

Temp Blank Received: Y N NA

Relinquished by/Company: (Signature)

Date/Time: 9/16/21

Received by/Company: (Signature)

Date/Time: 9/16/21

Table #: MTLI LAB USE ONLY

Temp Blank Received: Y N NA

Relinquished by/Company: (Signature)

Date/Time: 9/16/21

Received by/Company: (Signature)

Date/Time: 9/16/21

Table #: MTLI LAB USE ONLY

Temp Blank Received: Y N NA



ANALYSIS REPORT BBM21-10949

To F400101 SGS CANADA INC
LAIN GLOSSOP
3260 PRODUCTION WAY
BURNABY V5A 4W4
BC
CANADA

Project	CA20I-00000-110-18664-01	Date Received	12-Jul-2021
Submission Number	*BBY* 18665-01I / MI7012-JUN21 / 1	Date Analysed	14-Jul-2021 - 16-Jul-2021
Pulp		Date Completed	16-Jul-2021
Number of Samples	1	SGS Order Number	BBM21-10949

Methods Summary

Number of Sample	Method Code	Description
1	GE_FUZ90A50	Fusion, 550°C, HNO ₃ , 0.1g-50ml, Zr crucibles
1	GE_ICP90A50	Na ₂ O ₂ Fusion, ICPAES, 0.1g-50ml
1	GC_CSA06V	Control grade Total Sulphur and Carbon, IR Combustion
1	GO_XRF72	Borate Fusion, XRF, Ore Grade, variable wt.g

Authorised Signatory

John Chiang
Laboratory Operations
Manager

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WARNING: The sample(s) to which the findings recorded herein (the "Findings") relate was(were) drawn and / or provided by the Client or by a third party acting at the Client's direction. The Findings constitute no warranty of the sample's representativeness of any goods and strictly relate to the sample(s). The Company accepts no liability with regard to the origin or source from which the sample(s) is/are said to be extracted. The findings report on the samples provided by the client and are not intended for commercial or contractual settlement purposes.

- not analysed | -- element not determined | I.S. insufficient sample | L.N.R. listed not received

16-Jul-2021 10:17PM BBM_U0011875750

Page 1 of 4

MIN-M_COA_ROW-Last Modified Date: 05-Nov-2019



Project CA20I-00000-110-18664-01
 Submission Number *BBY* 18665-011 / MI7012-JUN21 / 1
 Pulp
 Number of Samples 1

ANALYSIS REPORT BBM21-10949

Element	Al	As	Ba	Be	Ca	Cd
Method	GE_ICP90A50	GE_ICP90A50	GE_ICP90A50	GE_ICP90A50	GE_ICP90A50	GE_ICP90A50
Lower Limit	0.01	30	10	5	0.1	10
Upper Limit	25	100,000	50,000	25,000	25	50,000
Unit	%	ppm m / m	ppm m / m	ppm m / m	%	ppm m / m
Core	3.01	<30	264	<5	0.4	<10

Element	Co	Cr	Cu	Fe	K	La
Method	GE_ICP90A50	GE_ICP90A50	GE_ICP90A50	GE_ICP90A50	GE_ICP90A50	GE_ICP90A50
Lower Limit	10	10	10	0.01	0.1	10
Upper Limit	50,000	50,000	50,000	25	25	50,000
Unit	ppm m / m	ppm m / m	ppm m / m	%	%	ppm m / m
Core	<10	384	32	0.80	1.4	<10

Element	Li	Mg	Mn	Mo	Ni	P
Method	GE_ICP90A50	GE_ICP90A50	GE_ICP90A50	GE_ICP90A50	GE_ICP90A50	GE_ICP90A50
Lower Limit	10	0.01	10	10	10	0.01
Upper Limit	50,000	25	100,000	50,000	100,000	25
Unit	ppm m / m	%	ppm m / m	ppm m / m	ppm m / m	%
Core	<10	0.14	141	1780	16	<0.01

Element	Pb	Sb	Sc	Si	Sn	Sr
Method	GE_ICP90A50	GE_ICP90A50	GE_ICP90A50	GE_ICP90A50	GE_ICP90A50	GE_ICP90A50
Lower Limit	20	50	5	0.1	50	10
Upper Limit	100,000	100,000	50,000	30	50,000	5,000
Unit	ppm m / m	ppm m / m	ppm m / m	%	ppm m / m	ppm m / m
Core	<20	<50	<5	>30.0	<50	45

Element	Ti	V	W	Y	Zn	@S
Method	GE_ICP90A50	GE_ICP90A50	GE_ICP90A50	GE_ICP90A50	GE_ICP90A50	GC_CSA06V
Lower Limit	0.01	10	50	5	10	0.01
Upper Limit	25	50,000	40,000	25,000	50,000	100
Unit	%	ppm m / m	ppm m / m	ppm m / m	ppm m / m	%

- not analysed | -- element not determined | I.S. insufficient sample | L.N.R. listed not received



Project CA20I-00000-110-18664-01
 Submission Number *BBY* 18665-011 / MI7012-JUN21 / 1
 Pulp
 Number of Samples 1

ANALYSIS REPORT BBM21-10949

Element	Ti	V	W	Y	Zn	@S
Method	GE_ICP90A50	GE_ICP90A50	GE_ICP90A50	GE_ICP90A50	GE_ICP90A50	GC_CSA06V
Lower Limit	0.01	10	50	5	10	0.01
Upper Limit	25	50,000	40,000	25,000	50,000	100
Unit	%	ppm m / m	ppm m / m	ppm m / m	ppm m / m	%
Core	0.03	22	<50	10	23	0.15
*Rep Core	-	-	-	-	-	0.16
*Std OREAS 135	-	-	-	-	-	7.43
*Blk BLANK	-	-	-	-	-	<0.01

Element	@LOI	@Al2O3	@CaO	@Cr2O3	@Fe2O3	@K2O
Method	GO_XRF72	GO_XRF72	GO_XRF72	GO_XRF72	GO_XRF72	GO_XRF72
Lower Limit	-10	0.01	0.01	0.01	0.01	0.01
Upper Limit	100	100	60	5	100	70
Unit	%	%	%	%	%	%
Core	0.52942	5.79	0.63	0.06	1.09	1.67
*Rep Core	0.53000	5.71	0.64	0.06	1.09	1.67
*Std OREAS 751	0.69600	16.05	1.07	<0.01	2.45	2.93
*Blk BLANK	99.9900	<0.01	<0.01	<0.01	<0.01	<0.01

Element	@MgO	Mn3O4	@Na2O	@P2O5	@SiO2	@TiO2
Method	GO_XRF72	GO_XRF72	GO_XRF72	GO_XRF72	GO_XRF72	GO_XRF72
Lower Limit	0.01	0.01	0.01	0.01	0.01	0.01
Upper Limit	100	100	60	55	100	100
Unit	%	%	%	%	%	%
Core	0.29	0.02	1.49	0.03	89.32	0.04
*Rep Core	0.29	0.02	1.48	0.03	88.51	0.05
*Std OREAS 751	0.53	0.09	3.46	0.28	71.99	0.25
*Blk BLANK	0.01	<0.01	<0.01	<0.01	<0.01	<0.01

- not analysed | -- element not determined | I.S. insufficient sample | L.N.R. listed not received



Project CA20I-00000-110-18664-01
Submission Number *BBY* 18665-011 / MI7012-JUN21 / 1
Pulp
Number of Samples 1

ANALYSIS REPORT BBM21-10949

Element	@V205	Sum
Method	GO_XRF72	GO_XRF72
Lower Limit	0.01	0.01
Upper Limit	10	100
Unit	%	%
Core	0.01	>100
*Rep Core	<0.01	99.82
*Std OREAS 751	<0.01	99.23
*Blk BLANK	<0.01	0.02

SGS Canada Minerals Burnaby conforms to the requirements of ISO/IEC17025 for specific tests as listed on their scope of accreditation found at <https://www.scc.ca/en/search/laboratories/sgs>
Tests and Elements marked with an "@" symbol in the report denote ISO/IEC17025 accreditation.

- not analysed | -- element not determined | I.S. insufficient sample | L.N.R. listed not received

APPENDIX C

SEN'S SLOPE/MANN KENDALL TREND ANALYSES

Appendix IV Trend Tests - Significant Results

Plant McDonough Client: Southern Company Data: McDonough AP Printed 11/8/2021, 11:00 AM

<u>Constituent</u>	<u>Well</u>	<u>Slope</u>	<u>Calc.</u>	<u>Critical</u>	<u>Sig.</u>	<u>N</u>	<u>%NDs</u>	<u>Normality</u>	<u>Xform</u>	<u>Alpha</u>	<u>Method</u>
Cobalt (mg/L)	DGWA-53 (bg)	-0.005485	-77	-53	Yes	15	0	n/a	n/a	0.01	NP
Cobalt (mg/L)	DGWC-40	0.002343	56	53	Yes	15	0	n/a	n/a	0.01	NP

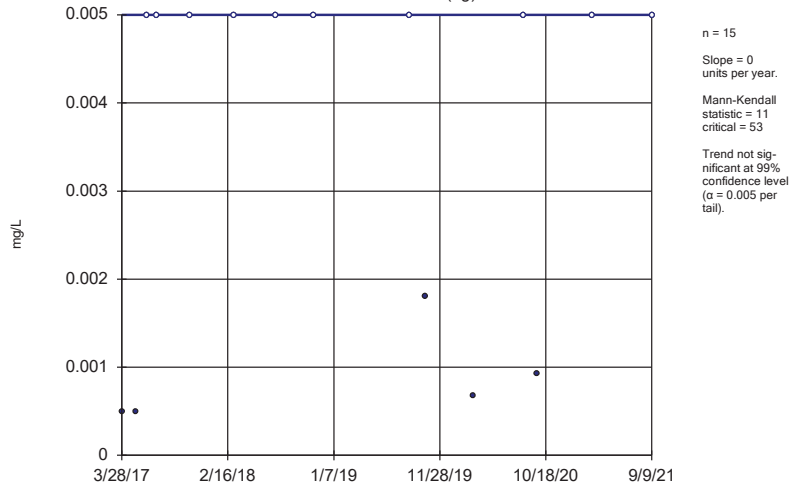
Appendix IV Trend Tests - All Results

Plant McDonough Client: Southern Company Data: McDonough AP Printed 11/8/2021, 11:00 AM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Arsenic (mg/L)	DGWA-53 (bg)	0	11	53	No	15	66.67	n/a	n/a	0.01	NP
Arsenic (mg/L)	DGWA-70A (bg)	0	-4	-53	No	15	93.33	n/a	n/a	0.01	NP
Arsenic (mg/L)	DGWA-71 (bg)	0	9	48	No	14	85.71	n/a	n/a	0.01	NP
Arsenic (mg/L)	DGWC-69	0.00508	52	63	No	17	0	n/a	n/a	0.01	NP
Cobalt (mg/L)	DGWA-53 (bg)	-0.005485	-77	-53	Yes	15	0	n/a	n/a	0.01	NP
Cobalt (mg/L)	DGWA-70A (bg)	0	13	53	No	15	46.67	n/a	n/a	0.01	NP
Cobalt (mg/L)	DGWA-71 (bg)	0	35	48	No	14	64.29	n/a	n/a	0.01	NP
Cobalt (mg/L)	DGWC-40	0.002343	56	53	Yes	15	0	n/a	n/a	0.01	NP
Molybdenum (mg/L)	DGWA-53 (bg)	-0.002607	-25	-53	No	15	0	n/a	n/a	0.01	NP
Molybdenum (mg/L)	DGWA-70A (bg)	0	0	53	No	15	100	n/a	n/a	0.01	NP
Molybdenum (mg/L)	DGWA-71 (bg)	0	13	48	No	14	92.86	n/a	n/a	0.01	NP
Molybdenum (mg/L)	DGWC-68A	-0.006801	-42	-53	No	15	0	n/a	n/a	0.01	NP

Sen's Slope Estimator

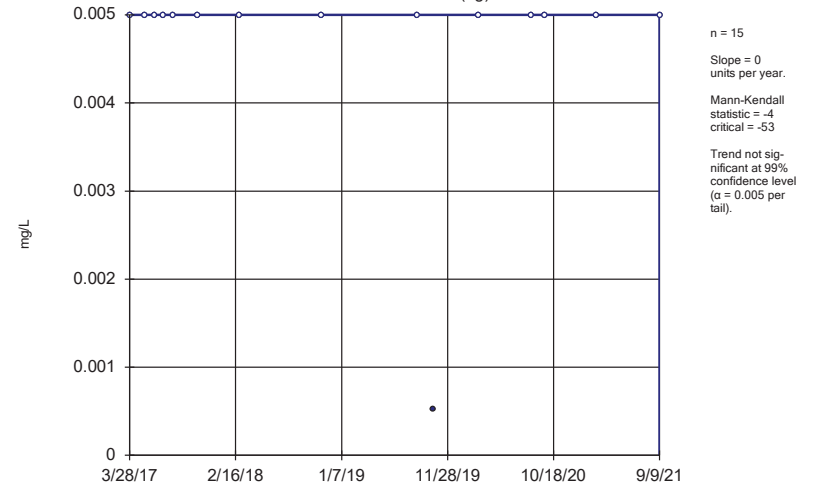
DGWA-53 (bg)



Constituent: Arsenic Analysis Run 11/8/2021 10:58 AM View: AP 1 Appendix IV Trend Tests
Plant McDonough Client: Southern Company Data: McDonough AP

Sen's Slope Estimator

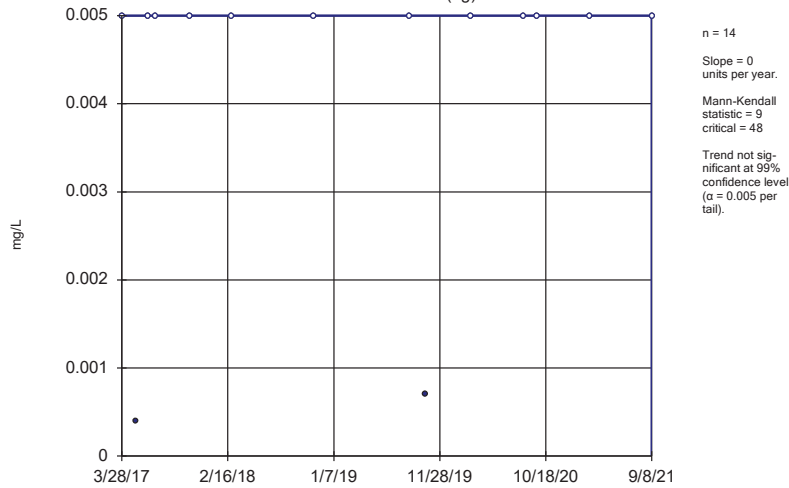
DGWA-70A (bg)



Constituent: Arsenic Analysis Run 11/8/2021 10:58 AM View: AP 1 Appendix IV Trend Tests
Plant McDonough Client: Southern Company Data: McDonough AP

Sen's Slope Estimator

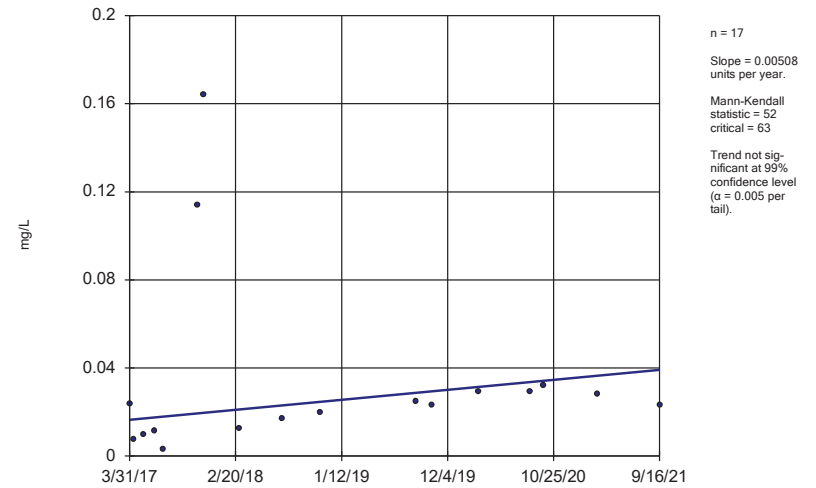
DGWA-71 (bg)



Constituent: Arsenic Analysis Run 11/8/2021 10:58 AM View: AP 1 Appendix IV Trend Tests
Plant McDonough Client: Southern Company Data: McDonough AP

Sen's Slope Estimator

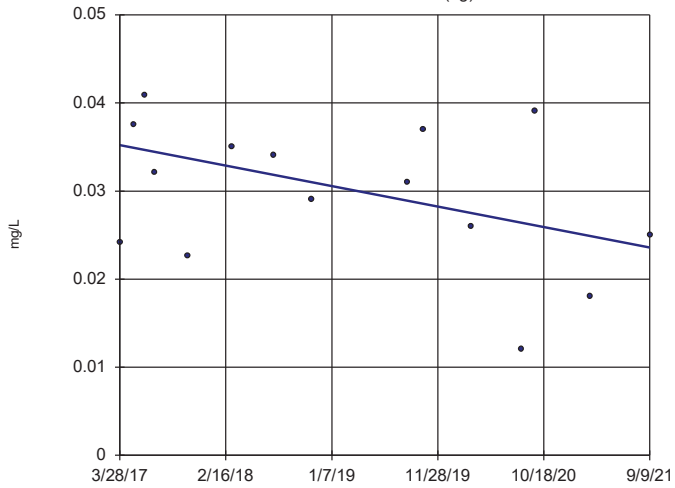
DGWC-69



Constituent: Arsenic Analysis Run 11/8/2021 10:58 AM View: AP 1 Appendix IV Trend Tests
Plant McDonough Client: Southern Company Data: McDonough AP

Sen's Slope Estimator

DGWA-53 (bg)

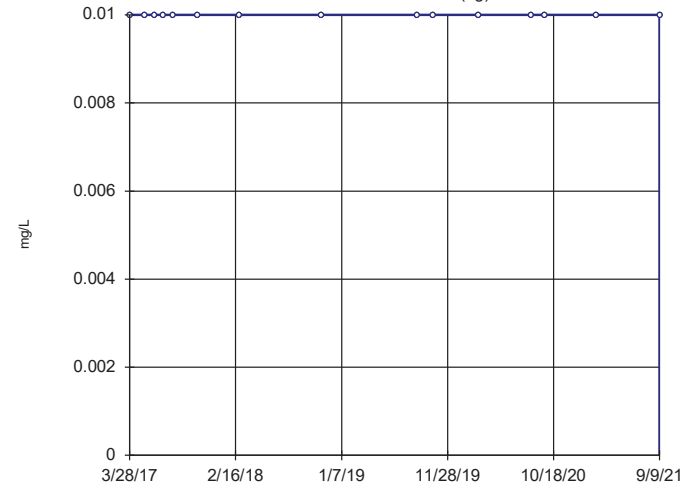


n = 15
 Slope = -0.002607
 units per year.
 Mann-Kendall
 statistic = -25
 critical = -53
 Trend not sig-
 nificant at 99%
 confidence level
 (α = 0.005 per
 tail).

Constituent: Molybdenum Analysis Run 11/8/2021 10:58 AM View: AP 1 Appendix IV Trend Tests
 Plant McDonough Client: Southern Company Data: McDonough AP

Sen's Slope Estimator

DGWA-70A (bg)

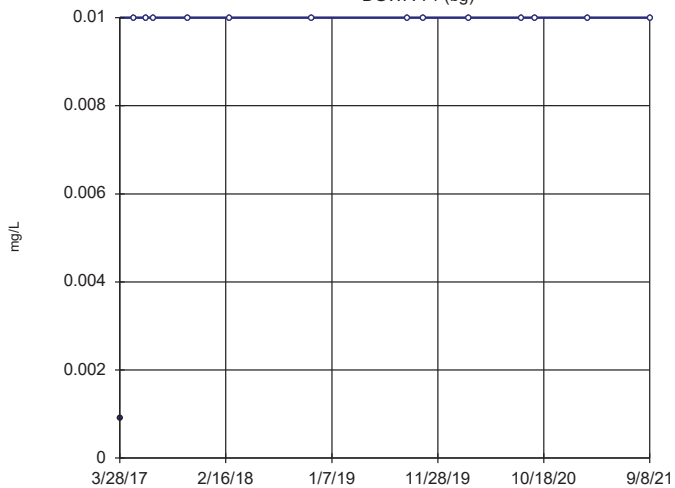


n = 15
 Slope = 0
 units per year.
 Mann-Kendall
 statistic = 0
 critical = 53
 Trend not sig-
 nificant at 99%
 confidence level
 (α = 0.005 per
 tail).

Constituent: Molybdenum Analysis Run 11/8/2021 10:58 AM View: AP 1 Appendix IV Trend Tests
 Plant McDonough Client: Southern Company Data: McDonough AP

Sen's Slope Estimator

DGWA-71 (bg)

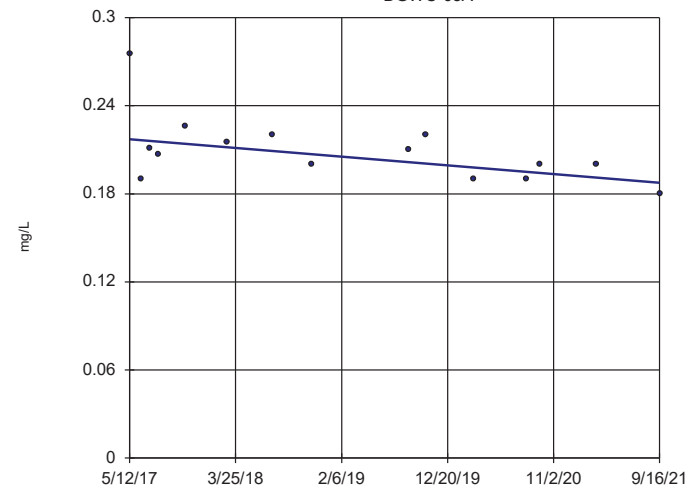


n = 14
 Slope = 0
 units per year.
 Mann-Kendall
 statistic = 13
 critical = 48
 Trend not sig-
 nificant at 99%
 confidence level
 (α = 0.005 per
 tail).

Constituent: Molybdenum Analysis Run 11/8/2021 10:59 AM View: AP 1 Appendix IV Trend Tests
 Plant McDonough Client: Southern Company Data: McDonough AP

Sen's Slope Estimator

DGWC-68A





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